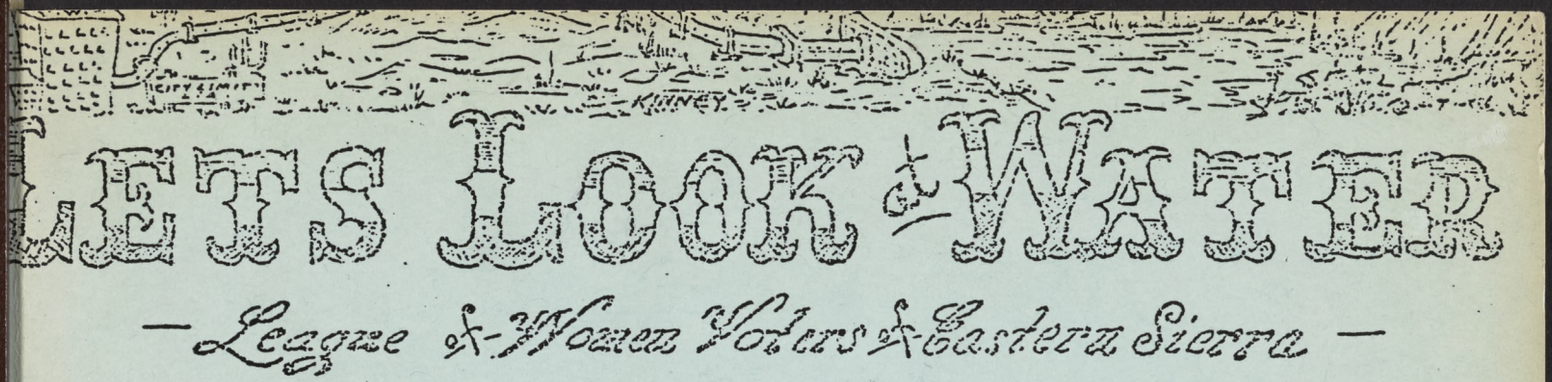


LET'S LOOK AT WATER

League of Women Voters of Eastern Sierra

March 26 & 27, 1977
Bishop, California



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PANELS

I. The Owens Valley in Perspective - Moderator, Cindy O'Connor

The Historical Perspective - Bill Kahrl, Author of "Politics of California Water: Owens Valley and Los Angeles Aqueduct".

Before the White Man - Raymond Stone, Piute Historian and Sculptor.

An Economic Commodity? An Ecological Community? - Genny Smith, Editor of Deepest Valley.

Natural and Human Resources - Pat Wiltsie, member of Inyo County Planning Commission.

II. Who needs Water - Moderator, Emilie Martin

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Agriculture - Dean Smith, Inyo-Mono Counties Farm Advisor.

The Land - Dr, Herbert Mason, author of A Flora of the Marshes of California.

The Wildlife - Dr. Richard MacMillan, Biologist, U. C. Irvine

The Urban Areas - Danella Cope, Water Consultant, League of Women Voters of Los Angeles

Wise Use of Water - Dr. Bill Eadington, Chairman of the Department of Economics, University of Nevada . Reno.

III Who's In Charge Here? - Moderator, Lois Ewen

Water Law and the Owens-Mono Basins - Tony Rossman, Specialist in Environmental Law and Legal Counsel for Inyo County.

Inyo County - Wilma Muth, Inyo County Supervisor, Third District

Los Angeles Department of Water and Power - Duane Georgeson, Chief Engineer.

The State of California - Guy Fairchild, Director's Staff, Policy Office, Department of Water Resources.

The Federal Government - Bob Rice, Supervisor, Inyo National Forest.

The Press - John Heston, Eastern Sierra News Service.

The Individual - Dr. Gunter Sommer, Professor of Philosophy

IV. What Decides Our Basin's Future? - Moderator, Helen Thompson

The Role of Aesthetics - Jock de Swart, Artist, Designer, Writer.

Balancing the Public and Individual Rights - Dr. Bill Eadington, Chairman, Department of Economics, University of Nevada, Reno.

Designing Liveable Communities - Donald Brackenbush, Environmental planner, Western Regional Manager, Wallace, McHarg, Roberts and Todd, Urban and Regional Planners.

Social Ethics and the Ethics of Nature - Dr. Gunter Sommer, Professor of Philosophy.

A Futuristic Look at the Quality of Life - Dr. George Seilstad, Astro-Physicist, California Institute of Technology, Owens Valley Radio Observatory.

WELCOME/THE OWENS VALLEY IN PERSPECTIVE

Cindy O'Connor: Welcome to our conference "Let's Look at Water", where we hope to look at land and water use for tomorrow in the Owens and Mono Basins. Before we begin, I'd like to introduce several people in the crowd and especially welcome them. I believe we have several Inyo County Supervisors here - Mrs. Wilma Muth, from the Third District, Mr. Dick Engles, from the Second, and Mr. MacDonald, from District Five (Lone Pine). We would like to thank you for coming. Do we have any City Council people here? We have a representative, Lois Ewen, a director at the state level, from the League; she will be on a panel this afternoon. We also have a representative from the Los Angeles League of Women Voters, Ms. Danella Cope, who is sitting here in the front row, who will also be on a panel later.

Last night before I went to bed, I glanced at a Reader's Digest just to get myself calmed down before I could go to sleep, and in "Quotable Quotes" the first quote was this: "The difficult part in an argument is not to defend one's position, but rather to know it", and I thought that probably was what this conference is about. When we set out as a League to do a study of the land and water uses here in Inyo County we realized how much information there is to know and how little most of the people who live here really do know. We all have opinions, but we do not know all of the facts. At the time we started, we thought it would be nice if we could conduct such a workshop as this. It has taken us - well, I think we first thought of it 8 or 9 months ago, and here we are today (barely)! We thought it was important to bring together the many divergent views that are here. There are various jurisdictions that need to be recognized and there are a lot of different attitudes that need to be known and aired. That is what the purpose of this meeting is. We hope that you will have a grasp when we are finished of all the ramifications of all the different ideas and possibilities that there are here in our valley. It is hard to know what is real with the high emotions that run with our particular situation and we are hoping that when we are through you will have an idea of what is possible. We also hope that you will have enough information to make some rational decisions tomorrow afternoon on where we want to go from here.

We have invited representatives from all the special interests that we could think of. Some of them may not be here, but it wasn't because we didn't try. We have tried to think of every possible group that needs to be represented, but I am sure that you will think of somebody and probably let us know! The conference is being funded by the Council for Humanities in Public Policy, the National Endowment for the Humanities, and their grant has enabled us to bring these people here and to pay some of their expenses. Inland Counties/Health Systems Agency has also provided

us with a grant for transcribing this conference. We will have people putting together transcriptions today. If you are going to want a copy, please make sure you sign up in the back. We do not know how much they will cost. The grant will not cover the cost of giving them to you for free but we will provide them at our cost - just the cost of the paper and running them off. If you do want one, be sure and let the people at the back know. We anticipate they will be ready in a couple of weeks.

The format for today is as follows: We will have four panels, two this morning and two this afternoon. It is a very tight schedule, so we ask that people please be prompt. With the exception of Mr. Kahrl who is the keynote speaker this morning, and Mr. Rossman who will set the tone for the afternoon, each panel member will have 6 minutes to speak. After all the members of each panel have spoken, they will each have 2 minutes to respond to whatever has happened up here. They do not have to use the 2 minutes if they don't want to, but we expect some idea will occur to them and they will want to use that time. After each member has had two minutes to respond, there will be a 15 minute session of dialogue between the panelists themselves. To make sure everything is covered, after that 15 minutes is up, we will open it up for questions and comments from the audience for 15 minutes. We must adhere to those time schedules very closely or we will never get done today. We do have a timekeeper, Mary Franke, who will set an alarm for the speakers and she will also give a warning to them that their time is coming to a close. They will get a 2 minute warning, a 1½ minute warning, and a 1 minute warning. The timer will go off at the end of the minute, and speakers have been requested to finish their sentence and let the next person talk.

We are now ready to begin our first panel. Our first panel is "The Owens Valley in Perspective". The members of this panel are Mr. William Kahrl, who is Director of Research for the Governor's Office of Planning and Research, and the author of "Politics of California Water: Owens Valley and the Los Angeles Aqueduct" which appeared in the California Quarterly, Spring and Summer of this year. We have reprinted copies of this article that are for sale in the back. We hope you will go to our publications table as we have several items there for you. The next speaker, who will speak on "Before the White Man", is Mr. Raymond Stone, who is a Paiute historian and sculptor. Speaking to "An Economic Commodity? An Ecological Community?" is Ms. Genny Smith, who is an environmental expert and editor of Deepest Valley and Mammoth Lakes Sierra. Speaking to "Natural and Human Resources" will be Pat Wiltsie, who is a member of the Inyo County Planning Commission and Secretary-Treasurer of Motivational Development, Inc. We are ready to begin now. Mr. Kahrl will be speaking to us for half an hour as our keynote speaker and he will be speaking about "The Historical Perspective of the Owens Valley/Mono Basin".

Mr. Kahrl: Thank you. I am going to keep a firm eye on the lady with the gong. Probably you do have more to endure with me than with anyone else you'll be hearing this morning, if for no other reason than that I am going to be going for a long time! I understand my assignment this morning is to raise some of the central questions that are going to be addressed by the panels today and tomorrow. The attempt is to place this meeting in some sort of historical perspective and that is a pretty tall order for anyone, and especially for me. Raising questions is an unnatural act for historians and government workers, and I suffer from both afflictions.

It is my job in Sacramento to answer questions, not to raise them. I work, after all, for a governor who is particularly adept at asking questions. In addition, I approach this morning's task with particular caution - as any flatlander from the outside should feel - when he suspects he has fallen in amid a band of feather merchants. You know what your problems are far better than anyone in Sacramento. We could not have started off better for this morning, for those of you who saw today's newspaper; the League is certainly to be commended for the art with which they have arranged court proceedings. I have been really taken up with the tremendous energy and excitement that has gone into preparing today's conference. There is a sense that this is a great moment in the history of your community; that the valley is united today in away that it hasn't been for half a century. We are meeting here to form a new beginning; somehow this time it is going to be done right. There is a mistake, however, in this kind of thinking, for if today's meeting marks the beginning of a new sustained effort to protect the valley's future, you will not be beginning again what was tried and lost by your predecessors in the 1920s. You will instead be beginning something altogether different.

Those efforts in the 1920s, the great days of the Owens Valley resistance, did not end in failure. True, they did not secure the valley's future, but that wasn't the objective. The ranchers who banded together to seize the Alabama gates and bomb the aquaduct had no plan or program for the long-term protection of the Owens Valley. The chance for that had passed long before. By the mid-1920s the leaders of the Owens Valley resistance were working simply to extract the highest price they could for their homes and businesses, and they succeeded wonderfully in accomplishing this very limited objective. The measure of their accomplishment can be found in the fact that they compelled the City of Los Angeles to ultimately make a very handsome settlement, much more than Los Angeles might have wished, despite the fact that the leaders of the resistance had themselves been discredited and the valley's economy bankrupted.

Now that was an effort geared for the short-term, quick end to the troubles; consideration for the valley's future had very little part in it. This meeting today, however, I believe aims for something much more difficult. In this conference you will be talking about the ways in which the Owens Valley can take hold of the determination of its own future, a task which since the 1920s has passed wholly into the hands of the Department of Water and Power.

Now, I am aware of a considerable body of opinion that the DWP has done a good job of shouldering the burden of responsibility for the valley's future - that leaving the driving to DWP has worked out pretty well. I find that attitude offensive. It is an attitude that says, "If the valley is beautiful today, if those of you who live here are healthy and happy, if the ugly hand of suburbanization has not left its sooty fingerprints here, then all of this has come to pass because the DWP willed it so." The offense occurs for me in attempting to ascribe a motivation to an effect. Let me give you an example. In the ("Oskarkan") and ("Kazistan") on the Siberian Plain, there were cities that were so completely obliterated by the passage of Genghis Khan and his Mongol hordes that they exist today only in legend; notrace has ever been found of them. And yet, I hear no-one today who hails Genghis Khan and his hordes as early advocates of the open-space preservation movement. I don't mean

to suggest that my friend Duane Georgeson and his cohorts at the Department of Water and Power are the spiritual descendents of Khan and his hordes. I merely wish to point out the risks inherent in such backwards reasoning.

Consider after all, what were Los Angeles' alternatives when it found itself in possession of virtually all of the valley in the early 1930s. They could scarcely have encouraged economic development and widespread settlement because each newcomer to the valley would inevitably become a competitor for the very water that Los Angeles had bought so dearly. Hence, the prevention of development was the only reasonable alternative available to the city, and the preservation of the valley's ecology was merely a happenstance, and, as DWP's recent actions would suggest, only a temporary by-product.

Taken to its extreme, such a policy achieves that best of all possible worlds for the City of Los Angeles by total and complete depopulation of the valley. That would be swell for the valley's environment but not so great for those of you who have been persistent, stubborn, foolish enough to remain and make your livelihood here. Los Angeles approached the valley, and has approached it consistently, as a resource for exploitation; its interest in the valley's future is conditioned on the preservation of that resource for the benefit of Los Angeles.

This is not a benign interest. It is not malevolent, either. It simply involves corporate action to protect an investment. All that you do here, the work you perform, the pleasures you enjoy, the hopes and aspirations you may form for your children, all this is not relevant to that interest. At a time of need, you are not partners with L.A., only competitors. Now this was the perception of William Mulholland, who conceived and built the first aquaduct and who fought your predecessors to a standstill. Mulholland never had the chance to see his triumph over the valley resistance; his shortcomings as an engineer eventually overcame his genius as a public administrator and he fell from power along with one of the dams that he had built. But even now, his precepts continue to direct the policies of the DWP towards the Owens Valley. In the final settlement at the end of the 1920s, for example, Mulholland's directions were followed to the letter. The city was to assume total control of the valley's water supply; secondly, no consideration was to be paid for the investments of those who had made their livelihood here; and thirdly, under no circumstances would the city alienate or return any right to water to the residents of the Owens Valley. Now, if the DWP continues to adhere to the precepts Mulholland laid down more than half a century ago, its ability to pursue those policies has been substantially reduced for a number of reasons.

This is really what I want to do here today, to begin to point out what I see as some of the differences, some of the similarities between the problem faced by the Owens Valley in the 1920s and the current situation. Now, what are some of those changes that have occured in Los Angeles? In the first place, I don't demean Duane Georgeson when I say that he does not, as the Director of the aquaduct today, exercise the same power Mulholland once commanded within Los Angeles. No one could. Mulholland became the majestic embodiment of the city's water programs and from that lofty height he shaped the city's growth and development - a giant in his own age, a hero to the city he served. In part, his word carried so much weight because he was the principal spokesman and progenitor of a progressive movement, the establishment of public ownership of public utilities. At the turn of the century this was the wave of an enlightened future and Mulholland was its leader. I think that too has

changed today, in part because Mulholland's actions in the Owens Valley did much to discredit the movement itself. Today, it is commonplace to say that nobody loves their local utility company. There is a great deal more controversy today within L.A. itself on the question of whether DWP's policies serve anyone's public interest. It is this change within the attitudes of the citizens of Los Angeles which may be the most important of all.

The building of the first aquaduct was a terrifically controversial event in Los Angeles, but all of the debate focused upon purely local questions involving charges of municipal corruption, questions of Mulholland's competence, questions of the quality of the water itself. At no time was any voice raised in L.A. on behalf of the Owens Valley to question whether what was being done with the aquaduct was right or fair or equitable for the interests of this valley. But if the Letters columns of the Los Angeles Times today is any indication, that too has changed. You may look today for allies and resources of support within the City of Los Angeles which simply did not exist in the 1920s.

Now, if times have changed in L.A., if the Department of Water and Power no longer enjoys the ability to pursue its policies without check or question, the task for the Owens Valley remains what it has always been. That is to find allies wherever it can. They will not come to you, they have to be sought out. This means maintaining close contact not only with your supervisors but also with your representatives in Sacramento. It means commanding the attention of your congressman and making the effort to inform and advise the officials of the City of Los Angeles, not the employees of the DWP, but the members of the City Council and the water commissioners to whom DWP must answer for its actions. To do all this requires a commitment of time and of resources, but most important, it requires a common sense of purpose, an agreement on what it is you want. Achieving the ability to speak with the authority of a consensus was probably the hardest task faced by the residents of the Owens Valley in the 1920s. They had at their disposal only two common elements that linked the separate communities of the valley together. First, and most important, was an active local press which functioned as Thomas Jefferson's "fireball in the night" to communicate events and developments in the struggle and to dispel the flare of rumor. Second was the chain of locally-owned banks which eventually formed a third organizing force through its sponsorship of a community water district. Throughout the battles of the 1920s, however, the valley remained divided. Perhaps this explains why the objectives of the resistance were so limited. It was easier to organize ranchers against a common enemy than it was to work for a common vision of what the valley could have and should have become.

In attempting to build a consensus today you continue to enjoy the assistance of a powerful ally, the DWP, whose actions probably do more than anything else to unite the people of the valley in a common cause. But there are at least two significant differences in the current situation that make this task altogether different from what it was in the 1920s. First, and again foremost, is the recognition that in speaking of the Owens Valley community today we are really speaking of two communities - the Indian community and everybody else. In seeking allies, none holds greater promise than the tribal councils of the Paiutes-Shoshones. They have land, they have water, and they have already begun to formulate a future for themselves within this valley which is inextricably intertwined with your own.

The other major difference is the suit Inyo County has pursued with some success against Los Angeles. One of the central tragedies of the history of the Owens Valley in the 1920s is that the leaders of the valley resistance never made recourse to the courts. Instead, they went outside the law and reaped the whirlwind. The significance of the suit, as I am sure you realize, is greater than anything Inyo will win or lose in that court. Through that courageous and forthright action Inyo has declared, in essence, "We the people of the Owens Valley are here and we mean to stay. We are one and we are committed and we shall continue as we are now and not as we have been." The court however, can grant you relief from the immediate threats that Los Angeles may pose but it cannot deliver your future. That you must fashion for yourselves in a process that begins by common agreement as to what you want for your own communities and then begins to look for ways to accomplish those objectives.

This conference is a first step, a forum in which you can begin to define common interests and common problems, but even at this early hour, I am beginning to wonder, "Where will you go from here?" What institutional structures can you fashion to carry forward the work of building a consensus to establish your own permanence and provide a basis, a means, by which you can take charge of your own future? Let me suggest a few governmental structures that you might want to consider forming at some point in the future. The simplest would be the creation of Municipal Advisory Councils, or MACs. MACs offer a unique method by which unincorporated communities can play a direct formal role in their own governments. First authorized by the Legislature in 1971 as an experiment in community participation, the MAC program has grown to include 25 separate communities in 8 counties in California. In some areas, such as Isla Vista, East Palo Alto, or Apple Valley, the formation of a MAC is regarded as the first step towards eventual incorporation or annexation. In other areas such as Joshua Tree, Running Springs, and Bloomington, where adequate economic growth for incorporation simply does not exist, a MAC becomes a permanent basis for community participation, a county-town if you will.

The creation of a MAC requires nothing more than an act by the Board of Supervisors, and the statutes governing the formation of MACs allow broad structural variations to suit the particular needs and interests of individual communities. The members of a Municipal Advisory Council, may be, for example, elected or appointed, as the community and its Board of Supervisors decide. It can have any powers the Board of Supervisors chooses to extend to it, and it can be funded by the county, through special grants, or out of the pockets of individual council members. An individual MAC can be formed to serve a single community, or it can embrace several communities where that seems appropriate. But whatever its formal structure, the MAC links the interests of an unincorporated community and provides a basis for action on common problems.

An alternative to the formal designation of a MAC might be the formation of Area Planning Commissions. Like the statutes governing MACs, California's Area Planning Law allows broad flexibility to enable communities to develop programs which are exactly suited to their needs. The jurisdiction of such commissions could include incorporated as well as unincorporated properties. All that is required is that the Board of Supervisors and the Town Councils affected, if there are any, agree to participate in the commission's activities. The law does specify that the members of an Area Planning Commission must be appointed by the

governmental agencies that create the commission. But the powers these members exercise is left entirely to local discretion.

Finally, and no doubt most difficult, would be the formation of an Economic Development District under the provisions of the Federal Public Works and Economic Development Act of 1965. Such acts can only be created by the Economic Development Administration in Washington. Federal approval can only be obtained by application of the governor. Furthermore, such districts can be composed only of counties and only when they are acting under a joint powers agreement within one of the state planning districts as defined by the Federal Council on Intergovernmental Relations. That all sounds very complicated, and for that reason, only two Economic Development Districts have been formed in California. They are both composed of your mountain neighbors directly to the north. The planning district in which Inyo lies consists of only two counties, Inyo and Mono, the Owens Valley. To form an Economic Development District, both counties must commit themselves to begin planning for their economic future together. Once formed, however, such a district enjoys exclusive access to a very large pot of federal money, and can obtain this federal assistance at a 10% bonus rate over conditions imposed on all other federal grants. To give you a few examples from the two districts in California, Alpine County this year obtained the first federal grant in its history, $375,000, to build a Civic Center. Tuolome obtained $675,000 to construct a water system. The city of Jackson secured an additional $960,000 for its own city offices.

Now regardless of whether these suggestions hold any interest for you, I have clearly made an assumption in proposing the last, and that assumption is that underlying the question of how to begin organizing your own future there is a more basic question of the extent to which the future of the Owens Valley is to be an economic future. I believe the two are closely linked, that the preservation of your lives on this land depends upon the creation of a vital economy within the valley. My basis for this belief is the respect I hold for your old nemesis William Mulholland. When Mulholland set out to break the back of the Owens Valley resistance he did not attack individuals or work to undermine the county's political institutions. He focused instead on the destruction of the valley's economy, and when he succeeded in that effort, the resistance evaporated instantaneously. The Department of Water and Power's leasing policies, their land management practices, and the death-grip in which they hold your town properties, have all worked to keep the valley's economy unstable, to minimize the opportunities for investment, to devalue any sense that you have a stake here. The establishment of a community college, the opening of a corporate outlet, even a housing project, in this context poses a deadly threat to L.A.'s interest in this valley as a resource for exploitation. There are risks, I realize, in talking about any kind of economic development in this area. Risks to property values, risks to tax rates, risks to the quality of life you enjoy here. But any investment in this valley strengthens you all.

Now, the decisions are up to you. They won't be easy to make or to carry out, but you've made a grand beginning already. Any action that is taken here ultimately involves the participation of the City of Los Angeles. If the relationship between those two communities, Los Angeles and the Owens Valley, is to be a cooperative one, then cooperation must be agressively pursued through every available political mechanism, through

speedy recourse to the courts, and through constant communication. These are time-consuming tasks but they do pay off. If the experience of the last twenty years in this country proves anything, it is that you can fight City Hall, even in Los Angeles. Thank you.

O'Connor: Our next speaker will be Mr. Raymond Stone, who represents the Paiute-Shoshone Indian bands here in the valley. He will speak on "Before the White Man".

Mr. Stone: Hello everybody. I was glad to be invited here to talk. This valley, at one time before the white people ever came over here, was a wonderful valley. This valley was at one time covered with water and it went down on account of the environment. We have a lot of springs in this country and a lot of these places have water: There were a lot of animals, different kinds of animals - deer, antelope, mountain sheep, jack rabbits, and all different kinds of birds. In my time, I look back at the springs that I have been to, especially a place in Black Rock Springs. I went there with my folks and gathered sugar cane. While we were there, during the day, my dad asked me to go out there and pick some clams; we called them freshwater oysters. Well, we went out there and picked some and we had them for lunch. I went back there not too long ago and looked at that place and it is different altogether. A lot of these springs are dried up. It made me think - What is our country coming to? What is going to happen to this country?

A few years back we had a meeting in Fort Independence with the Bureau of Indian Affairs and the City representative. We had a meeting with them, and my dad was there, and my uncle, and a few other people. They came out and said, "We would like you people to move to Coleville. We'll buy a place for you up there and we will move you people to Coleville." My dad spoke up and said, "We don't want to move. This is our country. We were born and raised here. Our forefathers are buried here, and we will stay here." The City said, "We own all this land. We are going to dry it up." My dad is quicktempered; he said, "You go ahead and dry it up. We Indians will be here until we die." This is true - my dad has died, and we still carry on.

Who does the water belong to? This water belongs to all people. It is time the people do something about it.

O'Connor: Our next speaker will be Genny Smith, who will speak on "An Economic Commodity? An Ecological Community?"

Ms. Smith: For uncounted hundreds of years Mr. Stone's people lived in harmony with, and caring for, this valley. Each new generation found the pine nuts and the mountain sheep pretty much in the same places their fathers had found them. Each generation found the valley as bountiful and sometimes as harsh as their parents had. Since 1899 when the first stockman we know about drove a herd of cows into the valley from Visalia, hoping to sell them to the miners who were panning gold up north of Mono Lake, white people have been changing the valley. Some have lived in harmony with it and really cared about it and some cared mostly about what they could get out of the valley. Each new generation found it vastly different than their fathers found it. Whether you think of its economic commodities, its silver, its tungsten, its soil, its browse, or its waters, or whether you think of its ecological communities, its marshes, its riverbanks, and

its grasslands, five generations of white people have changed them in every way you can think of.

It's hard to imagine what the valley was like 120 years ago. There are a few clues. I have time for only a couple, to read to you some comments by people who came here long ago. The first one is from a diary of Edward Kern who came through the valley in 1845, coming from Denton Hot Springs down Chalfant Valley and then heading south. In his diary he wrote on December 16, "Today struck Owens River. It is a fine bold stream." December 17 and 18, "Still on the river. Obliged to keep some distance from it on account of a large marsh. Wildfire in abundance." The key words to listen for as I read these comments are "marshes" and "grass" and to think what is in these places today.

The other diary or letter was written by William Brewer in 1864 when he came exploring with a scientific party over Kersarge Pass, down Little Pine Creek, and across to Bend City, east of Independence, to buy some fresh meat and get his horses shod. He wrote, in July, "This valley sees but little rain, but where streams come down from the Sierra they spread out and great meadows of green grass occur. Tens of thousands of the starving cattle of the state have been driven in here this year and there is feed for twice as many more." Then as he came up the valley and was somewhere up here, on July 31, 1864, he wrote, "Here a stream comes down and there is a sort of basin, where there are 9 or 10 square miles of the best grass I have seen in the state."

Another clue as to what was here is this old map of the Bishop quadrangle, which was surveyed in 1910. I know you cannot see it, but you can come up and look at it afterwards. It shows where a lot of the water was, from Big Pine up to Fish Slough. There were dozens of small lakes, little ponds, and miles and miles of marshes. Where the marshes were, of course, there were insects, all the things that eat insects - water birds, ducks, geese; where there were more plants, there were more rabbits, mice, and all the things that eat them - foxes and bobcats and eagles and hawks. People changed the plants in other ways besides just moving the water around and taking it away. They brought in trees. They also brought in thousands of sheep; heavy uncontrolled grazing before 1900 probably changed the plants more than we will ever know and probably demolished most of the native bunch grass.

Farming changed the valley. In 1910 there were 92,000 acres of irrigated projects. People have changed the animals. I don't have time to mention how many they reduced and how many they brought in, usually to the detriment of the native species. People have changed the meadows - they have dried them up, they have paved them, they have drowned them under reservoirs. All in all, it is hard to put Owens Valley into perspective because most of us have never seen it looking any other way than it has today. But in perspective, people have changed the valley in so many ways it is hard to even imagine. People are changing it today, and I gather one of the reasons most of us are here today is that we care about what direction it is changing in tomorrow.

O'Connor: Our last speaker on this panel will be Pat Wiltsie, who will speak to "Natural and Human Resources".

Ms. Wiltsie: My job in this gathering today is pretty much to tell each of you what you probably already know. There is enough of it to tell that I had better gallop along with it. My subject is natural and human resources of this area. The one I would like to speak about first is human resources. As Mr. Kahrl has pointed out, the Department of Water and Power doesn't necessarily think of anybody who lives in the Owens Valley as being a resource. We are competitors. When you are talking about resources, an individual or a substance or a product or a tree is a resource only in terms of an actual use. I would hope that you would all bear in mind this thought in what I am saying.

There are approximately 1,005 square miles in the Owens Valley. This totals 633,200 acres and is 9.9% of Inyo County. The human population is approximately 15,400 in this area. Now numbers of human beings are not what is so much to be noted; what is important about a human population is its spirit, the minds of the individuals who live in an area. Then we have to look at it for purposes - if we want to build an army then we are looking for brawn. We have to think about the people who live in this valley in terms of their minds and their spirit and perhaps brawn if necessary. Three thousand eight hundred people live within the confines of the city limits of Bishop. About 8,500 live in unincorporated areas of northern Owens Valley, so the predominance of the entire population of the County of Inyo is concentrated in the northern part of the Owens Valley. There are approximately1,355 persons in Lone Pine; Big Pine I would estimate at 900; and 780 in Independence. We do not have recent and accurate figures for this, so these figures are extrapolations from the California Department of Finance estimates.

Of the 643,000 acres of land in the Owens Valley, approximately 15,500 are in private ownership, which is about 2.4% of it. Now if we all think about that, that is where all of our human resources of this area are living. The City of Los Angeles DWP holds 246,800 acres, or 385+ square miles of this, which constitutes 38% of the Owens Valley. Most of the rest of the valley is controlled by the United States Bureau of Land Management and other governmental agencies.

The natural resources of this great valley are large. The combination of sunshine, air, water and the land is appropriate for agriculture. Prior to 1912 it is identified in our general plan that over 100,000 acres were irrigated. On the basis of the Department of Agriculture Soil Conservation Services general soil map, and recommendations of the State Department of Water Resources, 111,000 acres are identifed in the Owens Valley as having a productive capacity for alfalfa, hay, grain, vegetable and orchard crops, and irrigated pasture. This surely is a tremendous resource for a hungry world. For the moment this land remains.

There are potential energy resources in the Owens Valley. Annual number of sunshine hours here are close to the maximum achieved anywhere in the nation. Solar energy production may sometime become significant. There are possibilities of geothermal resources and in the near future explorationfor this will be taking place at Owens Lake. Even the frequent winds scouring the valley may soon prove a resource. Major utilities are now building experimental wind generators; this may be a possibility here. Owens Lake provides sodium salts which are used in industry.

Crucial to our discussion are the water resources of the valley, and the great underground reservoir below the valley itself, made known in the past by springs and artesian waters. The capacity of this is estimatd at 12 million acre-feet, although this varies with who is estimating. The water is part of the most vital resource of all, the scenic splendor of the Owens Valley that is a resource for all people. As vital as the water is in its direct use to man, its part in the beauty of this land is the greatest. It provides pools and wet places for all sorts of wild life from the pupfish to migratory water fowl.

O'Connor: That concludes this portion of our panel. We will now give each of the panel members 2 minutes to make any comments they may have.

Kahrl: I'm more interested at this point in just taking questions.

Stone: I will wait.

Smith: The only thing I wanted to ask was how many people...It is so hard to imagine what the Owens Valley did look like once upon a time. How many people in this room remember seeing the valley before 1950? Well, you as I, have seen one big change. That was Owens Lake drying up. How many people saw Owens Valley before 1925? I hope these people will, during the day, give us some more personal comments on what the valley looked like.

Wiltsie: Since I was the only one who was "gonged" of all the speakers, I will use my 2 minutes to say that among resources in the Owens Valley I believe the greatest economic resource we have is the scenic grandeur of the Owens Valley itself. It seems to me that carrying this in our minds as we think ahead and plan for the future is very very important.

O'Connor: We now have set aside 15 minutes for the panel members to talk to each other if they want to, and you. If they do not have anything to say, we will open it up for you.

Stone: There is something I would like to say. I put the question to you - Who does the water belong to? It does belong to somebody. You people know that the Indian people lived here from the beginning of time. We didn't come from any place; we lived here. The white people came in, in this valley, and you make your laws, take up land; the Indian still lives here. As I look back you got the land. All right, you got the water, and you sold out to the city. But the water still remains here, owned by the government of the United States, Forestry, Bureau of Land Management belongs to them. Where did they get that water? Who gave it to them? They take it. Did they buy it from somebody? Who gives them the right to take this water and sell it? The Indian in this country - we still own this water, we still own the land. I am speaking for myself because this is my country. I look upon the mountain; it has a symbolic meaning for me. It has a spiritual meaning for us Indian people here. This water still belongs to the Indian. The Indian sits back; we are waiting for our time. Somebody is going to come along and want to know, who does it really belong to? We are not selfish, we like to share our things. We like to share the water. We will have a wonderful country here, have good air, wonderful water. Go down to Phoenix - I have been there. I drink that water there; boy, is it hard to take! It makes me think about my own country up here - nice sweet water. It is a wonderful country.

It is a coming generation. Young people, that's coming. It is for

you people starting out to do something, because we are going to go to the happy hunting ground. We are all going someplace, so people, look to the coming generation; leave something for them. Thank you.

O'Connor: At this time I will open it up for questions and comments from the audience. Please try to keep your questions and comments brief and give everybody a chance. When you do ask a question or make a comment, would you please be sure to identify yourselves for the transcription. Otherwise the people who are doing the typing from the tapes won't have any idea who is speaking. There is a microphone over here which we would prefer that you use unless you have a very strong voice. Are there any comments or questions?

Rollin Enfield: I would like to find out a little bit more about what we do specifically to start an Economic Development District.

Kahrl: I think you start by - let me do it for you - asking the question, How many people are from Mono County here? Rev. Langfield invited me here last Monday and it was really one of my first ventures into the county government of Mono. There was one thing I was particularly struck by and that was the raising of the question, "Why is Mono not directly involved? Why are they separate and not directly involved in many of the steps you've already taken in this community?" The answer was, "Well, Inyo has a long history. They have always fought Los Angeles and we have always enjoyed here in Mono a much more agreeable relationship with Los Angeles - until the last three years." The first step is making that relationship and establishing that relationship with Mono County. That involves a whole series of questions on the degree to which those two counties see their futures linked one to another and not in a competitive relationship.

Enfield: Are we going to depend more on ourselves or our supervisors on what sort of a move would be necessary. Is the League of Women Voters going to be able to spearhead something like this?

Kahrl: The League of Women Voters, any one of your various organizations can. You can go ahead and describe the process because there is tentatively something in the wind already.

Doug Sherburne, Director of Planning: I think I should make at least a partial response to Mr. Enfield's question. We do have an organization called IMAG - Inyo-Mono Association of Governments. This organization right now is pursuing as part of its program what I refer to as a mini-study. It is a minimal effort towards evaluating feasibility of an Economic Development District within this region. We hope to have a preliminary report out in June sometime. There are people in the area aware of programs, at the federal and state levels, and we are looking into that.

Kahrl: It is terribly important that you be aware of that effort going forward in terms of how you proceed frm here and involve yourself. Doug is your servant, as I am, and is there to talk to you and to explain to you how to become directly involved in what it is they are studying. The next formal stage is to notify our office, the Office of Planning and Research, since we are administering the thing that you are interested in, and we can probably provide technical assistance as well as funding in terms of some of the initial planning for the formation of such a district.

It involves, of course, drafting a tentative joint powers agreement. Then, in order to form the district itself, quite apart from all the paper requirements, you have got to have a plan already developed. First of all you need the approval of the governor of your state. He has to make formal application to the Economic Development Administration. At the time the district is formed, it has to have at hand a plan, a formal plan that it can adopt within 90 days of its formation, for economic development within the region it is serving. The great thing that you have got going here, it seems to me, is that it happens that Inyo and Mono, because of the number of counties involved, is the smallest planning district in the state. Yet it is precisely a community of interest that is identifiable ahead of time.

O'Connor: Anyone else?

Jane Bright: I have a question for the panel, particularly for Mr. Kahrl and Ms. Wiltsie. On the one hand we have one of them proposing economic development as a means of preservation for our valley and on the other hand the other one stating that our scenic beauty is one of our greatest resources. It seems to me that those are two things that eventually might clash. I would like to hear from them in response to: Would not economic development, if carried too far, destroy that scenic resource?

Kahrl: Of course, if carried too far. I do not expect, as long as Edmund G. Brown, Jr. remains in office, that open front furnaces are a likelihood here or anywhere else in the State of California. The question here is the type of growth which you choose to make. There are a whole range of opportunities that you have. I have never seen that there are necessary contradictions between use of resources. Solar energy is perhaps one of the most interesting possibilities for the type of thing to occur in the Owens Valley. Again, the establishment of a solar energy facility within the Owens Valley is still again an investment that gives permanence to everything that exists here. One of the problems we all face the moment after we have begun our presentation is that we were supposed to begin to exchange views. That assumes that you are going to have a group of people who are going to have a lot to argue over. I don't know that we have anything to really argue about - a copecetic panel.

Wiltsie: I would like to comment that I think Mrs. Bright's question is excellent and certainly takes in quickly and in one question an enormous consideration for the Owens Valley's future. The Inyo County Planning Commission, several years ago, did comment on this problem and made a policy statement that those activities which would enhance, or be service facilities for, the scenic resource would be favored. Industrial development in the Owens Valley and in fact in the county would be disfavored and economic development would not necessarily be pushed for. That which would be looked upon with some favor would be that type of industry which would be small, perhaps a manufacturer of small parts, which would not be a polluting sort of thing, but would sit quietly and unobtrusively somewhere and employ people and provide an economic base for the town.

Kahrl: Let me give you a few possibilities. Solar energy development is one that is not a heavy industry; otherwise it is self-defeating - a polluting industry. I don't remember, but I was told, how far you have to drive to get into a college and it's an awful long way. I do not think that makes a great deal of sense. Why is there not a state-established junior college, or perhaps a community college here? I had hoped my friend Tom Hayden was going to be here today, but I guess his people

didn't make it. This is a public interest public policy study group that is looking for a location, a place to put a program where people will have seminars, study issues, things like that. They hope to put it in someplace that is rather pleasant to look at. That is the kind of activity that is neither particularly polluting and in many cases desirable. Housing - I do not know - Pat, do you know the figures on who it is that settles here? Two segments that I would think would be the type of people who are able to live in the Owens Valley are the people who are operating businesses that would be dependent on the communities themselves, service industries, or people who are either retired or in the type of profession where they don't have to live in an urban area to practice. If not attorneys then architects, for example. It is a fabulous place. I would love to come and live in the Owens Valley if there was a way to survive. You have tremendous possibilities simply as a planned resort, another Palm Springs, except this time it would be done right. It is not something I can do, it is something you have to decide for yourselves.

Wiltsie: Well, I would like to comment. I think it would be awfully nice if some governmental entity would like to move in, for instance with a college, and establish it here and provide a lot of money and build buildings and provide a payroll and also some cultural advantages to the area. But I would like to point out right away that we have such a small population and such a small tax base that building a junior college would be painfully expensive to the people of Inyo County. When you mentioned that, you hit a very raw nerve in me as a taxpayer and also as a representative in county government. The junior college district that would be required would cost people so much on their tax bills that it would be absolutely frightening. There is a group which has investigated establishing a privately funded college here, but first of all, there is no land upon which to build this college and secondly, the endowment that would be necessary would be equal to or exceed the assessed valuation of the entire County of Inyo; if this college had such an endowment it would have financial problems in operation. As far as that sort of thing goes, we really need a "sugar daddy" for the Owens Valley!

George Seilestad: I hear this argument that Pat said often. It depends on what you consider a college - a structure of several buildings and athletic fields and so on, in which case the cost goes very high. If you look at it as a community of scholars plus the students involved in it, you can be clever enough to develop a faculty and teaching program with facilities that are in existence in the community. If that is all you are talking about, the main cost is probably salaries for people. We have buildings that are not in use 24 hours a day, we have a television channel on cable that is a local thing. I wouldn't close the door on anything of this nature just because you think we have to do it the way it has been done in every other community. I think with sufficient innovation, we can have any kind of educational scheme here we wanted and the entire valley would profit from it enormously.

O'Connor: I saw another hand...yes?

Grace Enfield: There is no paradise on earth and people must choose where they are going to live. Most of the people who live here, I believe it is safe to say, have chosen this area because of its scenic grandeur, the clear air and the good water. We came here 22 years ago and each individual took a cut of $1,000 each in salary in order to live

here. We were willing to sacrifice money and perhaps the college you are talking about, perhaps some of the amenities, in order to have a place to live that has an excellent quality of life. I for one would prefer to see that we continue our recreation industry, keep our clean air, keep our clean water, and keep the kind of community we have now.

Mary DeDecker: I think it has been brought out, and will be more so as the day goes on, how we value the uniqueness of the Owens Valley. We talk about scenic grandeur and of course it is a great part of it. I think in trying to work out a solution to our problems we want to be very much aware of the danger of getting ourselves locked into something that would make our valley or our communities just like any other place. We aren't just like any other place. That is why we love it so much here. I do not think because something wasn't practical in the way it was done in some other place - maybe we can do it in a different way to suit the Owens Valley. For one thing we want to have a non-consumptive form of economic development. My greatest dream is that it could be just a fantastic center for cultural and scientific studies. We have it here; we have everything for it except buildings and so on; we have all the outdoor facilities. I doubt if most of the people here who consider economic things have any idea of the amount of people who come here every year just for fieldwork from colleges and universities. This sort of thing is not normally thought of as an economic asset, but I think we can develop this into something far beyond anything we have ever thought of.

Richard MacMillan, UC Irvine: Without committing the University to anything, since we have a friend of the governor here, I might add that there is a substantial plot of land owned by the University just out on the other side of Line Street that would make a beautiful campus. I volunteer to be a founding professor there!

Dick Westmiere: I work locally for the Bureau of Land Management. I took Pat's statement that there is no land available as a bit of a surprise because whether you know it or not, there is public land available at very nominal cost for projects such as colleges - $2.50 an acre.

Sherburne: I am the County Planning Director for the County of Inyo. I just received two days ago maps from the Department of Water and Power showing parcels of land in all four communities in the Owens Valley that are being contemplated being put up for sale. Now, I consider this to be perhaps just the first step towards a closer working relationship with the City of Los Angeles. With the land ownership pattern being what it is, I would certainly favor the county's pursuing the acquisition of more land for public purposes and community programs in these community areas.

Helen Thompson: I would like to know if the land we are talking about includes the water rights? Whether it is owned by UC Irvine, or whatever, does it include the water?

Westmiere: I can only say that the water under the B.L.M. land is federally owned as the lands are, and it would go along to support whatever projects the land is made available for.

Yan Kinny?: I would like to ask this gentleman from the B.L.M. a question. It is my understanding that all the B.L.M. lands in the Owens Valley are, by an Act of Congress, watershed for the DWP. Is this correct?

Westmiere: Yes, that's true. You have to understand withdrawal. Withdrawal prohibits certain kinds of acquisition of the land and that benefits what we were talking about earlier. It cuts the competition for the water. The water, in a legal state, belongs to the people of the United States. There are other laws that can be utilized for different purposes.

Dick Arnold: I would like to suggest that we consider two things today. One is that no matter what plans we proceed with for this valley, we look beyond the immediate and look to the future. As Mr. Stone said, our children and our children's children; that beyond that, we also avoid certain egotism that we are prone to. I think that says nothing has any value but for its relation to man. Whenever that attitude is taken I think the environment inevitably suffers.

Stan Hayden: I want to direct this particularly to Mr. Stone. I think the Indians are in an almost unique position of power to influence the course of events here in the valley because they are a minority and this is the age of the minority. Also because they have direct access to the Bureau of Indian Affairs and the federal government. I would like to ask Mr. Stone if perhaps the Indians are prepared to become more militant and perhaps impose their land ethic on the rest of us. I think that would be a very valuable thing if the Indians would do that.

Stone: I would like to make a little comment on that. You know, the Bureau of Indian Affairs is supposed to be our guardian, to look after the poor Indian. Along the line someplace they kind of forgot that when they made a trade with the City of Los Angeles that promised a lot of things - give you a good place out here, this is a good place. All right, I won't doubt that. But 4 acre-feet of water they allow for every acre. One time my dad went to Big Pine city office and wanted a little bit more water. It was downright sandy. He wanted to have a little bit more water. The answer he got was, "You have enough and we don't have to deliver you any more water"; that is where they are at. Like I said, when the city made the trade, the government was supposed to look after the water and make a good trade. The land that was set aside for the Indians of Owens Valley was scattered out through the valley. All these places, most of them, have water rights. Why fight the water rights for a few places here in the valley? So what we got now is 4 acre-feet of water. They don't have to deliver the water if they do not want to, but they have delivered the water. That is pretty skimpy water for us Big Pine Indians. Like I say, we have to do something because there are a lot of people in this valley. I have said this myself, maybe its a good thing the city owns this land so there won't be too many people in the valley. I go to different places throughout the valley, different places on this land, places where my Indian people used to live. I go out there and walk through the country, walk in this mountain on the west side of us here in the summertime. There are too many people. I go back on the east side here, there aren't so many people up there. There isn't any water, but I take water along. I go up there to be by myself to think of what our country is coming to, what is going to happen. Maybe I shouldn't worry about it. There is one thing I know is going to happen, and it has been told years ago by a medicine man. A time is coming when the Owens place is going to dry up and dust is going to be blowing up through that lake. That was told before the white people ever come up this country. But, he says, time coming again when there will be water in it. I have seen when there was water in the lake, and a lot of these other places -

Klondike Lake and another little place out here near Big Pine. I believe that his prediction will come true and there will be water in the Owens Lake, but it cannot be done by itself. It has to be done by the people. There are a lot of people in this county.

Dick Martin: I would like to address a question to Mr. Stone. You said some time ago that you thought the mountains and the water here had some symbolic or spiritual symbolism for the Indians. I would like to ask you if you feel that white people who live in the valley feel that way also. If you do feel that way, is there room for a partnership between the Indians and the whites in protecting the grounds?

Stone: Well, since you asked that question, I won't lie about it. I am what you call a medicine man, a spiritual leader of my own people. I help whoever comes to me and asks for help. It doesn't make any bit of difference. I can see a lot of white people also have a deep feeling for this country of ours, a spiritual feeling. I have had some come to my place and ask for help and I tell them I can't help them myself; I don't have anything, but I say, you have got to have faith in God and what you ask, so you can go and do your spiritual work or your religious work. They get their answer and go. I don't hold anybody, I don't have anybody under me. I help people so they can help themselves. They go out in the country so they can help their own people. We have common interests. White people, they have their own way of spiritually believing in God. Everything comes through God, Creator of heaven and earth and all things.

O'Connor: I think what he was asking was do you think we can work together; if there was a possibility for a joint effort to work together for a maintaining of this enjoyment of our environment. Do you think it is time that the Indian and the white man banded together to work towards that goal?

Stone: That is always the greatest goal there is, for all people to work together. I am very thankful to be able to see some of that in my time and I thank you.

Janice Nolan: I am very interested in hearing a lot of the comments that were made earlier about education. I think one of the advantages of a conference like this is that people find out that other people are thinking the very same things that you are thinking. Seeds can be planted and we can identify some focal points for that energy to be directed towards. I just think it is appropriate for me to share some information with you so that we kind of know where everyone's at. I am associated with a group that is developing this year's seminars that will be offered for college credit through the University of California at Riverside Extension. We are the Sierra Nevada Institute. We are very anxious to talk to people in the community about what your needs are in education and in what kinds of directions you want to go and really think in terms of how we can be helpful in this effort to bring better education programs and some economic development to the Owens Valley. If anyone is interested maybe we can try to be the focal point for that energy.

Bob Berger, Lone Pine: Is it true that in the Los Angeles/Orange County area most of the pollution comes from automobile exhaust. Is that not a fairly well-known fact? Thinking of that, then, I would like to ask anyone on the panel if they could just venture an opinion as to how many future inhabitants, or what would be the optimum population considering autos per person based on the statistics of the State of California, that

this valley could stand? Bear in mind the fact that we are the deepest valley; we are between two very high mountain ranges, and on certain types of days we could become quite smog-trapped. Keeping all that in mind, what would be your opinion as to the level of population beyond which, given the ratio of cars per person or vice versa, we dare not go. I am thinking of the fact that people would love to live here if they could. Like you said (to Mr. Kahrl) you would like to live here but you would have to bring your cars with you.

Kahrl: If that is the price of admission, I could do without!

Wiltsie: First of all, it is my opinion, and of course I am involved with planning, if the land were available within the reasonable future we would have what I call wall-to-wall housing. This would mean houses from the Inyo range, from the foot of those peaks, all the way to the foot of the Sierra Nevada. Automobile exhaust is not the only form of pollution of the air; fireplaces generate a great deal of pollution and the Owens Valley is the deepest valley, or one of them, and it does have a unique condition which is called an inversion layer. At such times air layers along the bottom of the valley (small portion lost due to tape turnover) ... ecosystem in the Owens Valley and we cannot handle very many more people in the northern part of the county.

Jock De Swart: The question I think is probably most appropriate to Bill. If assuming one of the areas, Bishop, Lone Pine, would incorporate as a city, and doing so maintain its level of services at the minimum possible level, and use volunteer mayors, assemblymen, etc., like the city of La Canada, and therefore keeping the tax rate at about the same level, would it then be possible as a city to condemn land owned by the Department of Water and Power in the center of the city and then lease it back on a 99-year lease basis for the same price it had to pay to condemn it, to local businessmen?

Kahrl: I don't know. It sounds reasonable to me. Are there any attorneys present? Do you know if condemnation rights are in that context? Not having been an attorney, and not having been involved in condemnation proceedings, I don't know how extensive those rights are. I have just been kind of sitting back there enjoying very much what has been happening. I should explain that one of the things I have learned about doing keynote speeches is that there should be something in them to offend just about everyone. You plant things all the way through to see if they will draw a reaction. Apparently at least one thing has. I think one thing is, as all the speakers have pointed out, in terms of preservation of the values, the environmental values of this valley exist, you don't have the capacity to preserve it at the moment. All the speakers talked about the changes that have occured in the last 20 years. Mary, for those of you who will be going on the tour tomorrow morning, will be telling you about all of the changes that will occur in the next 20 years if the pumping program was allowed to go forward. It is because the power to make those changes in the environmental balance of this valley reside in Los Angeles to a large extent, that the suit was filed at all. The suit was filed to retain some of that power, or to regain it, in fact. Now, in order to find the way to preserve the very things that brought you to this valley in the first place, of course is not simply a matter of saying, "Give it all to us",

but is also a matter of saying, "And here is how we are going to do it." Allowing things to proceed as they have been does not give you those kinds of mechanisms. Discussion of "How can we preserve what we have here?" and "What brought us here?" need to start. What is wonderful is that the discussion has already begun in the last half hour in which people are beginning to offer suggestions, ideas, the exchange is beginning to occur. People are beginning to find out who has resources, and things to begin exploring further. That is really what the next two days are all about.

O'Connor: On that base, I think we will call this particular session to a close.

WHO NEEDS THE WATER

Emily Martin: I am Emily Martin and we are resuming our panel discussion. We have had a very stimulating discussion on some general issues and some solutions and now we are going to hone down onto a very specific "Who Needs the Water?". Water is basic to the support of life. In that light, and realizing that water is a limited resource, I think it is very interesting that Owens Valley in the past has realized that very true fact much more than the rest of the state. But I think the drought has suddenly brought a lot of people up to the same level with us. Water is a limited resource - there is no way we can get around it. So with that in mind, we are going to look at "Who Needs the Water?" We have invited people to speak for various needs. By no means is this list all-inclusive. It was very difficult to even come up with this list because we realize there are so many competing needs. I think the dialogue does need to begin with this question.

On the panel, next to me, is Dennis McCoy, a skier from Mammoth. He is currently doing the day-to-day operations at Mammoth Mountain. He has been involved in the recreational needs of this entire community. Speaking for agriculture is Dean Smith, who serves as the Farm Advisor for Inyo and Mono Counties. Dr. Herbert Mason has written a book called A Flora of the Marshes of California. He is currently retired and has done a great deal of work in this endeavor. Looking at your bibliography, you will see some of his other credentials. Speaking for the wildlife is Dick MacMillan, a biologist at UC Irvine. He has already spoken once- you may recognize him. I should say he had a question earlier. We prevailed upon a very dear friend of our League to come and speak for the urban areas when we could not prevail upon the city fathers in Los Angeles to come. Danella Cope is the consultant on water to the County of Los Angeles League and she serves as the environmental quality consultant to the City of Los Angeles League. She is perhaps the first League member who suggested someone, somewhere should look at the impact on the source of water. We are very delighted to have Danella with us, but we put her in an awkward position of speaking for a metropolitan area, and we do appreciate her participation. With us also is Dr. Bill Eadington, who is Chairman of the Department of Economics, University of Nevada at Reno. He has taken the field of economics and looked at the issues we are talking about. He has been involved in a study of Lake Tahoe; he has been involved in another conference funded by the California Council for the Humanities in Public Policy, and he has looked at community participation.

We have assembled this panel to begin the discussion on "Who Needs the Water?". I am going to let Dennis McCoy begin.

Mr. McCoy: I have always thought of recreation as play and being a native of the valley, I have probably always taken it for granted that the valley would always be here and we would always have thousands of acres of water to enjoy without much thought. In the last few years it has become very obvious to all of us that that is not the case. So when I was asked to speak, the first thing that came to my mind was, "What is recreation, really?". I went to Webster's, and Webster said, "Recreation is a means to restore to health or a refreshment of strength and spirits after toil".

Then I looked at the people which we host every weekend. They come primarily from the City of Los Angeles, and that is what they're doing. They are getting out of the hustle and bustle and the madness and whatnot that they have confined themselves to in the City of Los Angeles, and they are coming to see us, to this valley, as a means of restoring themselves to health. What has happened is we have moved into the position of taking on the obligation as a valley, as a people, this means of restoring these people to health.

Sports is primarily what recreation is composed of. I have gathered a few interesting statistics about sports. The bulk of sports that are the most popular sports have something to do with water. In the winter, we have of course snow skiing. Snow skiing from the years 1973 to 1976 was the no. 2 fastest-growing sport in the United States. In 1973 there were 7.73 million participants. In 1976, there were in excess of 11 million participants. It experienced, in that period of time, a 42% growth. Snowmobiling was the no. 3 sport in growth in the U.S. in that same period. Other sports which are less commonly participated in, but are also very active winter sports are ice skating, ski touring, sledding, tobogganning, and general outside touring.

In the summertime, as we all know, the no. 3 sport as far as participants in the nation, is the sport of fishing. Our valley hosts numerous fishermen, and our livelihood depends on that. In the United States in 1976 there were 58 million participants, and in the western part of the U.S. 52% of the residents owned their own hiking, camping, and backpacking eequipment. Of course, in the U.S., the no. 1 participation sport is swimming. There are also numerous other aquatic sports which our environment in the Inyo-Mono areas lend themselves to, such as water skiing and whatnot.

There are some interesting statistics which the U.S. Forest Service has put out which relate to the people that come to the valley. In 1966 the number of people that enjoyed the Inyo National Forest in the Mammoth ranger district was 1,326,000. That grew, in 1975, to 2,445,000. In 1976, when we experienced a slight drought primarily in the winter season, that dropped to 2,100,000 people. My main point is that the valley <u>is</u> a recreation valley. The recreation depends on the water, the mountains, and the scenery in the valley. Being a recreation valley, the people coming to the valley have taken on the obligation to handle these people and build the recreation business. In turn, the City of Los Angeles should recognize, and I think is beginning to recognize, the fact that the local people are providing a very necessary service to the citizens of the City and County of L.A. - the opportunity to come and restore themselves to health and good mental spirits.

We are, from the recreation industry, dependent on the water and the City of L.A. is dependent on us to provide them with water. One thought is that recreation uses the water in process. The skiing and the other winter sports activities use the water in its frozen state, when it is virtually useless to anybody else in the form of domestic use, industrial, or agricultural use. In the summertime, the recreation industry uses the water as it is flowing to its other uses. Recreation uses water in the dams, reservoirs, and streams; it has little pollution factor and little depletion factor on the water on its way to other uses. Thank you.

Martin: Thank you Dennis. Who else needs the water, Dean Smith?

Mr. Smith: Agriculture. I have a little leaflet that we pass out to people who want to find out what the agriculture needs are and things of that sort. I have put them on the table. That is the only thing that will not cost you anything!

Agriculture in Inyo and Mono Counties depends on water for production of hay, pasture for livestock, and of course, livestock drinking water. It is used for surface irrigation, and we often forget that we have subirrigation which is very important. That is usually located along the riparean water ways, such as of the Owens River. These are highly valued by the livestock and theranchers, particularly subirrigated pastures.

Agriculture requires probably the largest quantities of water of any type of water use, and requires very large quantities as compared to the domestic needs of people. For example, surface irrigation requirements for an acre of pasture of alfalfa hay over a 6 month irrigation season varies from 3½ to 5 acre-feet, depending upon how efficiently the water is applied. This is equivalent to 1 to 1½ million gallons of water over the 6 month period. I did some calculating, using City of Bishop figures, and in contrast, an acre of houses in Bishop at 4 to 6 houses per acre requires only about 4/10 of an acre-foot or 130,000 gallons during a similar 6 month period. The question then, is how important is agriculture to all the people who live in the Owens Valley. It certainly is important to those making their living at it. The gross value of livestock production and hay production in Inyo and Mono Counties is $8 million according to the Agriculture Commission's figures. Since ours is an economy of small businesses, every business is important. Agriculture is one of those businesses.

From an environmental and ecological viewpoint, domestic livestock contributes to the multiple land use concept and their management is compatible with the managment of game animals, fish, wildlife, flora and fauna of this area. Irrigation is beneficial to the flora and fauna in addition to its value in producing forage for livestock. Agriculture also contributes to the aesthetics and recreational value of the area. It is pleasing to the eye to see livestock grazing, green pastures, green alfalfa fields. It is also valuable to paint or photograph these against our scenic background. Finally, agriculture in Inyo and Mono Counties makes its contribution to total food production and its importance in that respect does not need further emphasis. We should remind ourselves that this nation is the most productive agricultural nation in the world and that the percentage of our incomes that we pay for food is the lowest of any country in the world.

Now, based upon these important criteria, I think that water for agriculture is needed and that it does compliment the other water uses in this watershed.

Martin: Thank you Dean Smith. I have been anxious to hear from Dr. Mason for some time. He has worked in this field and without further ado, I am going to let him speak for the land.

Dr. Mason: If my distant colleague from Irvine, who is going to be the next speaker, doesn't include plants under wildlife please see to it that he does. Otherwise we will have to settle it out of court!

Plants are wildlife in anybody's language. When I was asked to speak about who needs the water, the land, I thought for a moment. How

do you relate the land to "who"? And then I said, "The land is the medium by 'Who' gets the water." That is precisely the case. There are three levels where we usually discuss water in the soils. That is the water table, then hydroscopic water taken up by soil granules, and capillary water inbetween. This is where the problem is that you are being confronted with here.

The use of any more water out of the basin disturbs that continuity between the watertable, the hydroscopic water taken up by particles of soil, and the capillary water bed. That continuity must be maintained intact. It can be disturbed greatly by excessive evaporation. You have that here in the summertime because you are a desert area. It can be disturbed and broken by lowering the water table so that the continuity of the hydroscopic water and the capillarity is broken. I lived in Wisconsin and in our backyard we had a flowing well, an artesian well. We were lucky. When the city put in a new airless system to their public water supply, all the artesian wells in the community stopped. We no longer had our well, and that is what's going to happen here. It is already happening. The springs have stopped flowing, and it is going to happen to a greater extent. The great danger will be for the natural vegetation: the breaking of the continuity of the underground water system between the root zone of the vegetation and whereever the water table will be when they get through - if there will be a water table.

Basically that is what I have to say. The question in my mind, however, is: Is the problem something that the whole nation is facing? What do we do about it - bureaucratic dictatorship? Elected officials have not discovered a way of handling it. They are suffering from the same problem. The people have not been able to solve it as yet. How do we handle it? That may be our real problem. I think I better stop here and let people question me.

Martin: Thank you, Dr. Mason. We will let people question you, I am sure. Speaking as a person who lives in the metropolitan areas and speaking as a person who is very knowledgeable in the use of water, I present to you Danella Cope.

Ms. Cope: The Los Angeles area and Southern California in general has been very slow to respond to the need for conservation. Southern California has been told, up until recently, that there is an adequate water supply for Southern California, failing to add "in the event there is no drought". Southern California has not been affected directly by the drought. The groundwater basins have been replenished regularly with supplies so that the conservation has not been encouraged by any of the water agencies. The Metropolitan Water District has argued that they did not want a curtailment in the deliveries of the state project water because it would interfere with their ability to pay the interest on their bonded indebtedness. The Department of Water and Power also has to pay for the aquaduct and they also want the full development of the hydroelectric power, so they have not previously encouraged conservation. But today, I think everyone realizes the state water project entitlements can be cut and that the drought affects everyone.

No one who attended the governor's Drought Conference in Los Angeles on March 8 and 9 can be in doubt of the severity of the drought and the seriousness of its impact. The year 1977 is the driest year on record. The year 1976 is the 3rd driest year on record. We all know the precipitation

is down 20% of normal; the snowpack is 20-40%; the reservoirs, most of the major reservoirs, contain only a third of their capacity. In normal times, California derives 40% of its water from ground water basins, the 60% coming from surface water. In times of drought, of course, the amount obtained from the ground water basins in increased. Now, there has been an increase in the ground water withdrawal. There is a declining water table throughout the state, an average lowering of 2 meters. Even before the drought began, on a state-wide basis, the ground water basins were being depleted at a rate of 7% per year. So for some time we have been operating on a water deficit. The conjunctive use of ground water and the surplus surface water has been planned for some time. The San Fernando Valley in particular has a large reservoir storage capacity, but unfortunately this conjunctive use has not been put into effect in time for this drought.

The Metropolitan Water District has released 400,000 acre-feet of water; it has released its entitlement for this year to be delivered to the central California region. The Department of Water and Power does have an educational program, offering speakers and films to civic organizations. Hosever, these agencies oppose any mandatory ration and they oppose any efforts towards a 25% reduction, as the governor has requested. The average citizen is not aware of the severity of the drought and opposes any curtailment in the state water project. We paid for it and we deserve it. Likewise, they are confused on the issue of the Owens Valley question. This brings up the questions of water rights and priorities. The governor has established a commission for revising the California water laws to review and recommend changes in the present law governing water rights. The existing laws contribute to a wasteful use. There has been no change since the mid-19th century in the basic rights process. There will also be an examination of priorities. It has been assumed that municipalities could not accept shortages and agriculture could. The concept that domestic use has higher priority than agriculture use is a state policy written into the California Water Code.

Now it is time to identify the non-essential uses of each category and accept less when that is what is required. In Britain, after 18 months drought the water consumption went to half. The British priority has been industry and agriculture first, safety and health second, and domestic users third. In this urban area, in L.A., the water is 53% residential and 37% commercial and industrial. I think maybe I will have to reserve the rest of my talk for my 2 minutes later.

Martin: Thank you Danella. We will be back to you. Now we will turn to Dr. Bill Eadington and ask him the same question - Who needs the water? What are you hearing amongst this panel?

Dr. Eadington: It is sort of funny, but the title of my presentation is "The Wise Use of Water". I come from the state of Nevada, where the 3 major bodies of water, Lake Tahoe, Pyramid Lake, and Walker Lake, are all undergoing significant change because of either urban or agricultural pressures put upon them. For example, Walker Lake, located near Hawthorne, is predicted to dry up within 30 years because of agricultural demands. Pyramid Lake is also a lake that is drying up relatively rapidly because of agricultural demands coming from the community of Fallon, and urbanization demands coming from the cities of Reno and Sparks. Lake Tahoe, which has received quite a bit more notoriety and is undergoing substantial environmental and rural-to-urban change, primarily because of population growth

stimulated by the major recreational activity in Nevada, which is gambling.

I would like to retitle my comments "Planning and Pessimism" based on what I have observed in Nevada and what I have observed in earlier years in Orange County and San Jose, California. In any planning process, there are really four questions you should ask, and I would apply this directly to the citizens of Owens Valley as they try to map out their future. It is a big question to ask, "What do you want your valley or community to be over the next 20 to 30 to 50 years?" It is a good question to ask because of the other questions it leads you into.

First, it asks you to determine, what are those ideals? What are the values that you see here that you would like the community to become? As Mr. Kahrl has referred to before, this would be the consensus which the members of the community would strive towards. The next step is to examine what is going on. What are the trends that are occuring within your valley or within your community, and which of those can be identified as being consistent with the ideals you stated? Which of those run counter to it? On those trends which are negative, those which the consensus would indicate are leading in the wrong direction, what policies can be undertaken to counter the trends? Again, I think some of the comments earlier this morning were in light of that. Where do we want the specific direction of the valley to go? The last question, or set of questions, is probably the most important.

Under any policy that you choose, you must honestly evaluate the likely side effects that are likely to occur. Will you be generating a solution which is in fact even worse than the initial problem you were confronting? I imagine a lot of my pessimism comes from studying places like Lake Tahoe and like urban growth in the Reno-Sparks area. One of the difficulties you run into is a combination of irrationality in the private decision-making process, and the inability of any kind of public decision-making coming up with any direction which is really any better than what you have to begin with. Just to quickly give you a brief overview of what is happening at Lake Tahoe, the Tahoe Regional Planning Agency was formed, by state contract and in conjunction with the federal government, in 1969 for the purpose of preserving the unique environmental character of the Lake Tahoe area.

Lake Tahoe, if you have seen it, is really a very beautiful pristine area. However, since the Tahoe Regional Planning Agency came into being, the permanent resident population at Lake Tahoe has about doubled. The Tahoe Regional Planning Agency recently released a study which indicated that if all the approved casino projects in the Tahoe basin are developed over the next 5 years, the population will increase by another 80%. The roads around Lake Tahoe will have to increase from 4 lanes to 10 lanes, sewage capacity will have to double, the number of low- and moderate-income housing units will have to increase by about a third. All of these things cannot be done, yet they are going to have to be done because of the irrationality of the combination of private decision-making on the part of the casino interests and on the lack of direction provided by the regulatory agency whose purpose was to save the situation.

At any rate, there are certain principles that can be drawn out of this and that are very appropriate as you examine your future. First off, the greatest clout that you will run into will come from economic institutions. You have probably experienced this historically withthe Department of Water and Power. The hardest entities to move are those that have a very strong economic stake involved. At Lake Tahoe, I think the gaming interest is the parallel. Secondly, economic decisions have a problem

of being short-sighted. They have a problem of thinking too much to the immediate future - to the next 2 to 5 to 10 years - and in so doing end up short-changing future generations or even yourselves 10 to 20 years down the road. A third comment is that you cannot solve problems of community growth and control by taking away from others what is legally theirs. A lot of people will claim historically property rights were generated through less than honorable means. Nevertheless, if you go in and try to take away existing property rights from people now, you are going to create the kind of polarization that is going to work you away from a decent solution. A fourth and sort of subtle factor - if you brought a community college in here, or if you brought industry in here to strengthen the economic base, and if in fact it started to perform what you saw were good objectives for the community but it also increased the rate of population growth, one of the problems that would create is that it is very difficult for a community to slow its rate of population growth. There are vested interests within the community whose economic livelihood depend upon that existing rate of growth. What happens is that you end up jumping on a chariot that is growing much faster than you are capable of controlling. I will save my other comments for later.

Martin: Thank you. Before we give him a chance to bring up his other comments we are going to test your retention and see how well you retain this, because I made a mistake and missed one panelist. I apologize and we will go back to the wildlife and Dick MacMillan.

Dr. MacMillan: Thank you. I am glad you didn't forget me altogether. The two major environmental commodities that wildlife depend upon are water and energy. In arid environments, such as the one we have here, where there is sufficient water, there is sufficient energy for the organisms, so water availability is very likely the all-important environmental consideration for the livelihood of the organisms we are talking about.

Today I want to emphasize the role of water availability in the lives of certain selected animals. I will try to bring in a plant or two as well. These are the inhabitants of Owens Valley that are adapted to a variety of water needs, but nevertheless all are equally but differently dependent on water. These animals range from strictly aquatic to completely terrestial but include all of the major groups of vertebraes, so if we can have the lights off and the projector on, I will show you a series of slides.

This is a photograph of what some of you will recognize, of Fish Slough, which is thought to represent the last remaining element of completely undisturbed Owens Valley ecosystem. It is jointly managed by the DWP and the Bureau of Land Management. Of particular interest is an endangered species known as the Owens Valley pupfish, which occurs only here. Its fragility in terms of continued existence is demonstrated by the fact that the pool of water in which it resided several years ago began to dry up. The efforts of a former student of mine, Bob Brown, saved this entire species from extinction. I think this is a lesson showing the role that Owens Valley can play in providing refuges for endangered forms.

Moving a little further north, this is a photo taken of the Eastern Sierra Reserve operated by the University of California. This is a spring-fed meadow whose existence is entirely dependent on the permanent rather high-volume flow of water in the springs. One of the organisms that occurs there, and very few other places in the Eastern Sierra, is the mountain beaver. This is a dead one found last summer in the meadow. This animal is entirely dependent upon the lush foliage as its primary energy source.

Close to Bishop, at the base of Wheeler Ridge just north of Round Valley is a small meadow spring which also is owned, I believe, by the Department of Water and Power. This forms, because of the presence of a small permanent spring, a permanent moist island surrounded by sagebrush, and as such, represents an ecosystem unto itself, with a variety of organisms. Here is one, a California king snake. This animal requires the kinds of foods that include amphibians, certain mice, and small birds that are attracted to a moist ecosystem. It requires the shelter provided by marsh kinds of vegetation, both in terms of heat and cold exposure.

Another important element of this ecosystem, at least on a temporary basis, is the rufus hummingbird. There are three species of the hummingbird which breed in the states of Washington and Oregon, and which in the summertime migrate along the eastern flank of the Sierra, literally in the thousands. This is one of these three species. Two days last summer, in this meadow, in order to demonstrate the abundance of these animals, we netted, marked and released about fifty of these birds. We never saw any but two again, showing how rapidly they do indeed pass through.

Also you note the yellow coloration on the forehead of this animal. That colloration is pollen, primarily from Indian paintbrush which you can see blurred in the background. Indian paintbrushes are depended upon in the activities of hummingbirds for their fertilization process. These birds are dependent on these kinds of flowers for their sole energy source.

Moving on to a more arid situation, this is the Great Basin spade-foot toad, which lives under almost strictly desert circumstances, spending virtually 95% of its life underground in burrows waiting for the next spring. They are dependent upon the spring, however, to provide temporary pools of water for reproduction. They have polliwogs and everything else as amphibians typically do.

Lastly, another arid adapted form is the kangaroo mouse. These occur in small populations isolated from each other. The nearest that I am aware of one to here is near Benton Crossing. These animals are independent of water; that is, they can subsist upon seeds and water that is produced as a byproduct of metabolism to meet their immediate water needs. They are also dependent on seeds of annual plants which in turn are dependent on rainfall to provide the stimulus to germination. In addition, these animals will not reproduce unless there is green vegetative material present in the form of annual vegetative leaves and stems. This is the cue for reproduction to these animals; even though they are arid-adapted they are also highly dependent upon existing and predictable water resources.

I think that is the last slide; we can have the lights on. Thus, whether the wildlife are fishes, reptiles, amphibians, mammals, or birds, all are equally and differently dependent on predictable supplies of water. Without this, they will perish and so will millions of years of nature's creativity. We are in a position to determine their fates.

Martin: We are ready for our second round, which will be a 2 minute response on the part of each panelist on what they heard the other panelists saying. I will let Dennis start that off.

McCoy: I was just commenting that 6 minutes is not nearly enough to make a point for any one given topic, but I would like to comment on one thing that Dr. Eadington said. Once you begin to grow and establish a rate of growth, that rate of growth tends to perpetuate itself. A few figures from our Inyo-Mono area in the era of 1970-74: the permanent population grew 22%. On a state-wide basis, it only grew 4.5%. The Mammoth Lakes area grew at the rate of 73%, so that in and of itself is a rather frightening outlook for our area unless there is sufficient planning to handle that. Another thing is that most areas have their primary income from wages and salaries. In our general area you have the disproportionate amount of its income from proprietorship-type businesses; in other words, small businesses. Statewide, 7.2% of income is proprietorship income; in our area, it is nearly 14%. A lot of small businesses rely primarily on the tourist trade or recreation-type industry. Another interesting aspect of the economic outcome of water in recreation is that income as a volume of taxable sales has increased steadily every year, up until lastyear when it declined when we had a drought. I am sure that most people are experiencing the same type of decline this year with the lack of snow. We can look into the future and see what might happen if the water was taken away from this valley and the people that depend on the recreation-oriented visitors for their livelihood.

Smith: Well, we hear about compromise, and I think this water issue will end up in a compromise decision between the County of Inyo and the City of Los Angeles sometime, but those of you who have been here since the early 1960s, or came here before the middle 1960s knew that all this land was flood-irrigated. All the alfalfa land was flood-irrigated. Now, the Department of Water and Power, in preparing these ranchers for the second barrel, have started working with them to try to get them to use water more efficiently. What you see today is, up and down these alfalfa fields, sprinklers; and this was a compromise, a trade-off between the DWP and the rancher. The DWP participated in helping the ranchers develop these improved irrigation systems. The point I am trying to make is it made the ranchers more efficient in producing their alfalfa, and it increased their production at least a ton per acre when they went to a sprinkler system. By the same token, the DWP got them to use the water more efficiently. There has to be something in it for both sides for a compromise to happen. I think the sprinkler systems are an example.

Mason: I probably should have mentioned one point further, if that is permissible now. That is that we are operating on this problem in accordance with what is known as Liebig's Law, the law of the minimum, which says, "Whenever any factor approaches the minimum, the consequences are proportionately much greater". We are just about at the minimum right now with the water situation. If we lose any more, the amount you lose will produce much greater effects.

MacMillan: I will take my couple of minutes at this point. As Dr. Mason suggested, we are nearing the stage of minimum resources. There is an ecological rule which has attracted a great deal of attention to animal planning policies in the last several years. We call this rule "resource allocation". It says that in order for organisms to coexist, especially

if they are dependent on a finite renewable resource such as water, they must learn to partition themselves and share it. It is becoming progressively apparent that humans, in the past, have not had to operate within the confines of organisms' communities. We have assumed that water and energy, even though they may be renewable, are unlimited. That obviously is not a valid assumption. It seems to me that we can learn a great deal from natural communities, and that in fact, we must recognize and take responsibility for membership in natural communities and learn to partition resources in the way that other organisms do. In that way, I think we can all coexist.

Cope: I would like to talk about what is being done in other communities, in other urban areas. Like I said, in our own Los Angeles area, 53% of water use is residential and 37% is commercial/industrial. The industrialists are already instituting conservation of water because their charge for waste-water treatment has increased in the last few years. So it remains for the rate for residential use in Los Angeles to be cut. The governor has asked for a 25% cut; the mayor has asked for a voluntary 10% reduction. You must remember that at the time of the Arab oil boycott, we were asked for a 10% reduction in energy; we were able to get a 17% reduction. Now, in other areas, Marin County is having a 57% mandatory rationing. The East Bay-Oakland area has 25% rationing. These are all mandatory. San Francisco also has 25% mandatory rationing. Sacramento has a voluntary program - 20-30%. I think San Diego County has just instituted 25% mandatory rationing; Monterrey has mandatory rationing. The State Energy Commission has made a report that pointed out that by the use of two simple conservation devices, the low-flow showerhead and bottles in the toilet, we can save 14% in Los Angeles. I want to make one concluding remark. A 25% reduction is necessary if there is continued drought. It is necessary even if there is normal precipitation next year to replenish the ground water sources and to replenish the reservoirs.

Eadington: It is interesting to note that one of the most popular topics of the 1970s among the academicians and among the general populace has been the right of communities to determine their own futures. There has also been considerable interest in what a lot of people have termed quality of life. I think someone expressed it earlier this morning. People are seeking out living environments which not only fulfill their economic needs, which historically have been most important, but also fulfill a number of noneconomic needs, such as aesthetic needs, a need to be close to nature, a need to be out of an urban environment, etc. There is also a growing recognition that we are living in a world of limited resources. A lot of those resources that only ten years ago we took for granted, such as petroleum, clean air, and water, are now resources that we can see and acknowledge their limitations.

One of the questions is, "What kinds of strategies should you pursue, given this kind of general format?" In trying to determine the direction of your future, perhaps the single most reasonable direction you can pursue is to choose courses of action which will keep your future alternative choices open. Now a parallel - if you go back to the decisions that were made in the 20s regarding the Owens Valley water and the DWP, you would see that they may have been reasonable short-term economic decision, but they have the very bad long-term effect of closing the options available to this valley. Well, given the current status of alternatives open to you now, if you choose some of them, you close out a lot of others. The biggest problem with that is that there is an irreversibility involved in a lot of these decisions. Once you have made them you can't go back.

Then your future choices, or the choices of the future generations are substantially thwarted. I think another factor that you should keep in mind - this is very pragmatic - is don't place your faith in a belief system. Don't believe, for example, that a government agency is going to come and solve your problem. On the other hand, don't believe that the decentralized decision-making of free enterprise will also solve your problems. The reality of the situation is that neither of these will work by itself. It probably will take a substantial intelligent input from certain members of the community.

Martin: If the panelists wish to engage in a dialogue we have some time set aside for that. Is there anyone who wishes to respond to it?

MacMillan: Yes, I have a question. Mr. Smith started with the statement that no matter how fresh the water is that occurs in a local area, when it is evaporated it leaves salt behind. I think looking at dry Owens Lake illustrates this very well. I am going to ask Mr. Smith if there is a problem of increasing soil salinity by the application of irrigation water to farm lands in the Owens Valley.

Smith: No, I wouldn't say there is...not simply because of the sprinkler system?

MacMillan: Because of the sprinkler system and the evaporation of the water continually over several years in one place.

Smith: Well, it could happen over a long period of time, but our water is such good quality here that it might show up in a long period of time, the deeper the soil gets. In the foreseeable future I don't think there would be any problem.

MacMillan: Do you then not think that this is something to anticipate? I guess what I am asking is what would happen to farmlands that became increasingly saline so that they were no longer appropriate for crops?

Smith: Well, the largest danger (and I know I am probably stepping on some people's toes), the biggest problem, is the high water table. They contribute to the salt, the surface salts, more than anything else. The water tables are close to the surface, with the aforementioned capillary attraction, and bring the salts up. Then as the water table recedes, it leaves salts near the surface. The water table probably has contributed and will contribute more to the salt problem than the sprinkler system ever will.

Martin: Thank you. Dr. Mason wants to reply.

Mason: It has to have heavy evaporation to really deposit the salts. I don't know whether any of you are old enough to remember when the radio first came in. They had floods along the San Joaquin River and the agriculture people would get on the air immediately afterwards and say, "Get that water off your soil. Get that water off your soil immediately." The problem there was the salts in the soil coming to the surface, a high evaporation rate, leaving a high concentration of alkali, which is difficult to work with agriculturally.

Martin: Thank you. Any other questions on the panel of each other?

MacMillan: I might make a remark that our recreationalist, Dennis, failed to mention. One of my favorite recreation areas is Hot Creek...

McCoy: That came under swimming.

(Questions From the Audience - Tapes Sometimes Unintelligible)

Bob Berger, Lone Pine: A question for Ms. Cope. What emphasis has been given by the City of Los Angeles in the past few years to the possibility of obtaining water primarily from the Pacific Ocean? In other words, desalinization.

Mason: I can say something about that. They are confronted with the high probability that it is going to cost too much money, which is the wrong approach. Almost everything we have ever done we've made increasingly cheaper the farther we have gone with it. I share your ccncern about that. I think we should spend a lot more money on desalinization of the ocean than we are doing at the present time.

Berger: Your attitude is that as far as the City of Los Angeles is concerned right now about (desalinization), that is on the back burner.

Mason: I don't even think its on the burner.

Martin: I would like to give Danella an opportunity to respond to that.

Cope: I would agree with this. It has been a question of economics up to this point. If the time comes when the water goes up in value, and perhaps reaches its true value, its true price, then desalinization can be competitive. At the present time, it has not been competitive. They are working on various processes to make it competitive, but that time is not yet here.

(Man): When you boil it down, there is our real water problem and our only water problem - desalinization. All of these other things are peripheral to something else.

(Man): I would like to turn(?) a thought here. A lot of communities look at water as their limiting resource. They only look at one specific resource as the limiting factor and I think this is a mistake. For example, water in L.A. in the 40s was a limiting resource; in the early 60s it was viewed as a limiting resource. They brought it in from the outside, which has allowed L.A. to grow and flourish and become what it is today. I think in a broader-range planning mechanism, you have to be aware of a lot of things that can go wrong. In L.A., air pollution was something that was not anticipated to be as bad as it turned out to be. Traffic congestion and urban sprawl were not anticipated to be as bad as they should have been. If you only look at one limiting factor like water, and then you solve that problem - you say, "Oh boy! We've got it." - then you just may be opening up the door to create problems that are even worse than the one you started with.

(Man): That is the bureaucratic dilemna - anticipate.

Cope: I think there is one little thing when you are talking about desalinization. You have to consider the energy question; the use of energy and water are very much interrelated, so when we are conserving water we are conserving energy, which in turn conserves water because it takes an enormous amount of cooling water for the electric generators. The question of desalinization becomes one of energy and energy conservation.

John Lemon: This is a question to Dr. Eadington. ... You talked about strategies and planning processes to pursue. One thing you mentioned was to keep your options open. You also indicated that there are certain economic institutions and interests which often provide some of the biggest obstacles to various planning schemes. It may interfere with certain types of economic growth and therefore might be a disadvantage. As I understand many planning processes, many of them involve cost/benefit analyses which consider those resources that can be assigned economic values. For example, beauty, wildlife, etc. and whatever else, to name just a few. Now many people consider (?) resources which have a similar point in time, may not have a known economic value. These people go out and see that these are important and should be included in the decision-making process. ...Resources people might not have known economic value...aesthetic consideration...certain plants and animals again have no known economic value at a particular time. My question is how can a planning process be changed to include all the resources which have no known economic value and are also important?

Eadington: My answer to the question is somewhat pessimistic. You have to remember the reasons. Let me give a quick runthrough of this whole problem of planning. The first thing to keep in mind about planning and the use of resources - economic or noneconomic - is they are for people. I think its a mistake to say we need to preserve the environment for its own sake. They are for people, whether the people are of this generation or future generations. One of the difficulties with cost/benefit studies is that they attempt to take the resources that you are dealing with and put them in dollar terms. The only way a tree is worth anything is when you cut it down and turn it into lumber. There is a basic difficulty for bias within that specific method. Another problem with that methodology is it tends to be very short-sighted. The logic of economics is based on the logic of the individual and every individual dies and every individual discounts what he will receive 10 or 20 years from now to a value substantially less than what he receives now. So when you use economic tools to try to make rational decisions, you build these biases into your decision-making process. There has been an acknowledgement of these problems. One of the ways around it has been to try to measure in other units of measurement than dollars the values of various entities. Here you run into another problem because a lot of things are just not measureable. I get pessimistic here because as you try to rationalize this whole process of trying to do the greatest good for the greatest number of people, you end up getting caught in traps of your own methodology and those traps lead in 5 or 10 years to your saying, "Well, that is crazy. No sensible man would have done that." Nevertheless, that is how our decision-making processes seem to go.

(Unintelligible statement by another man.)

Eadington: The biggest problem is finding the appropriate trade-offs. For example, if you were to wholly preserve the environment then what you would have to do is eliminate people. That is not a very viable trade-off, because mountains and trees and sparrows - I don't place them on the same plateau that I would individuals and their rights and their needs and so on. You have to deal in the world of trade-offs. When you are dealing with trade-offs then you are talking about trade-offs of values and that is where the measurement problem comes in. How do you evaluate a non-economic use of the resources against potential economic use. That is a tough question.

(Another Man:) Let me say I agree with his statement about trade-offs. That is why I suggested it is important for us to recognize we are part of a larger community other than a strictly human community. With that sort of ethic in mind, then one can begin practically, or at least to begin to think of resource allocation, in those terms.

Bill Worthington, Lone Pine: I would like to direct a question to Dr. Mason, or somebody that knows something about water chemistry. For many years the Department has put copper sulfate in solution form on the intake...to kill algae that clogs up the pipe on its way to Los Angeles. Now, does that have any potential hazards ultimately to people or things or what?

(Answer): That copper sulfate is for several reasons. The fish will not live in that water. If you get too much of it, yes, it will have an effect. I can't answer how little is required, but I do know there are a lot of people using copper sulfate to dispel algae or pond scums, and quite successfully. Where you put it in the intake...do you have any idea of how much you are getting, at what levels?

(?): 2000...???

(Answer): It takes a certain level and I don't have the figures in the back of my head as to how much. I do know that in public water supplies where they are dealing with pond scums or algae they use copper sulfate and sometimes at a level at which you can see it. It discolors the water.

Cope: The State Department of Health has set standards and is now revising its standards on drinking water, the drinking water quality, so if you feel that the present standards are not adequate then I think now is the time to make it known to the State Department of Health because they are revising their water quality standards.

Mary DeDecker: I would like to hear some discussion on the values of the alkaline communities which we have so much of in the Owens Valley. I feel they are very valuable and I would like to hear Dr. Mason and Dr. MacMillan speak to the value of these communities that are supported by high ground water...

MacMillan: I can comment briefly on the two natural values. One is a composite one; that there is a large number of ephemeral invertebrates that has usually drought-resistant aids such as brine shrimp and several other kinds of crustaceans whose entire existence is dependent on these dry saline sinks. When water is present in them even for a short period of time, it breaks the dormant stage of the developmental cycle and they flourish as adults and go through entire life histories. Without these and without the presence of water at least occasionally, these animals

would become extinct. The second consideration is the importance of atroplexes or sulfurs not only as a very interesting plant community but also in terms of the dependence upon this plant community of the Great Basin kangaroo rat, which a person named Jim Kanady has studied extensively near Big Pine. These animals, it turns out, are entirely dependent upon the use of atroplex or sulfurous leaves. These animals deal with the problems of salts in these leaves in a very unique manner. They let the salts be restricted to the outer part of the leaves and these animals shave the outer parts off, discard them, and eat the remainder of the leaf which is very high in carbohydrates. From a single plant they get their entire living bulk in terms of water needs and nature needs. Finally, if the ground level were dropped to the point where the taproots of these salt-making plants couldn't reach, the plant would be in trouble and would be extinct as well as at least one of the animal members of that community.

Mason: Can I speak to that point too? I am going to make a point that may seem to be on the negative side, but I wanted to make it at least appear to be on the positive side. Fifty years ago, who would have believed that the green mold that occurs on cantelopes was worth anything whatsoever? It happens to be a commercial source of penicillin. There is an awful lot that we do not know about these plants. In fact we know very little. The amount that we know is infinitessimal compared with what needs to be known. Who knows when somebody is going to discover that a particular species out there in that alkaline flat is the source of some chemical substance that could be very important to us. We will call on the farm advisor to help us bring this thing to cultivation. We need it immediately. And he won't know, so we will have to do a lot of work. In fact, the (yoruba?) plant, right now, the (hobi?) which was a few years back was declared the number 1 plant by the United States Department of Agriculture in its call for funds. It grows wild in the desert and contains a natural wax that has the power of increasing the hardness of mineral oil to make mayonnaise out of the oil that is nonfattening. There are all these other types of things that people like to talk about, that could be grown here, if you could just discover a way to make it grow artificially. There are many other things of this kind. There is so much that is left unknown that I doubt if we have the rights to dispose or cause any of it to become extinct. We are denying the people that are to come the opportunity to study these things and do something with them. We have had so many examples in the last few years of very important things that have come out of what we did not know about prior to last time, I think we owe it to ourselves to pay attention to that point of view. The negative part of knowledge that is positively very important - the fact that we don't know anything about it. Every plant is a manufacturing plant. Maybe that is why they call it a plant. It is carrying on biochemical operations, manufacturing fromthe oxygen in the air and the nitrogens of the soil and many other things and bringing them together to produce substances that the plant uses. Every plant is different.

Smith: Can I just add to that? There is research going on at Stanford University on these salt-loving plants amongst these species of atroplexes which shows that they have an unusual metabolic pathway or a photosynthetic pathway which results in producing in a period of time much more of what we call food energy than virtually any other plant. So these do indeed represent a great potential if not for lifestyle food, perhaps also for human food in the future.

DeDecker: Another present value -the air pollution question...

Smith: They can only be replaced by other halocites - salt-loving plants - because of the salt built up in the soils. That is why these specially adapted forms occur here now. I can see how anything other than halocites, unless the salts are leeched out, that exist in these places.

Mason: Most halocites require large amounts of water at least certain seasons of the year. They can tolerate drying up part of the year, but certain seasons of the year the very fact that they are growing is evidence that they are taking salts out of the soil and recombining them in their tissues into something else. They leave the area as the leaves are either eaten by animals or drop off and are blown away by the wind. They are important in the water-halocite system of the habitat. Marsh plants' greatest importance to man is that they operate to purify the water. When the delta was dammed we set in motion a domino system of destruction. In the first place the area of every island was at one time a reservoir of fresh water than came down the rivers and was held back by the tides. Then that fresh water would flush Sasoon Bay and got the salt water out of Sasoon Bay that was backed in there by the tides. That happened at every change of tide. When men, without thinking about the consequences, put the banks around the islands that held all that, they denied Sasoon Bay its flushing water. We lost the oyster industry, we lost the clam industry, we lost the shrimp industry to San Francisco Bay as a consequence of that in the domino effect that sent on. Pay a little attention to what you are doing. We can't leave it to ignorant engineers.

Smith(?): Is recreation a clean industry? Not always - Mammoth has a water problem....

Eadington: Lake Tahoe is in a very similar situation. It is an area that has substantial natural beauty but it is also tremendously valued because of its recreational uses. Virtually everything that happens at Lake Tahoe is recreation-oriented whether it is gaming or outdoor use of the lake or whatever. Lake Tahoe is a draw-down(?) reservoir for the cities of Reno and Sparks. This year it is about 6 or 7 feet below its normal level. One of the difficulties that may occur here is that if the recreation industry in this area becomes a very important industry, and if it is expanding over time or if construction is also tied into the expansion over time it is very very difficult to halt or slow down or take into account all these other consideratins that you consider important because the entity generates its own dynamics. It must continue to grow at least in the short-term to keep up its cash flow, to keep pursuing its avenue of expansion and so on. The biggest problem you may encounter is something which is presently a pleasant sounding alternative. It may turn into the monster that you end up hating 20 or 30 or 40 years down the road.

Mason: Let's face it. The problem is not a water problem. It is one of over-development.

Eadington: It is a people problem. I will come back to that.

Mason: If you put your attention there, you may get somewhere.

Eadington: There is another factor that has to be taken into consideration. A lot of communities are taking the position that we want to preserve the beauty of our community. We will therefore try to restrict the amount

of growth we will have. The only catch to this is that if every community does this, where do people go? There are certain obligations we have as members of society to cater to the needs to the rest of society and this is what makes it such a difficult problem.

Mason(?): Beauty is not something you preserve. It itself is dynamic. It is constantly changing.

Eadington: People in Los Angeles or San Francisco say the changing nature of the city itself is beautiful, while people from rural areas sort of scoff and say its a very perverted form of beauty.

Jane Bright: I would like to address my comment and question to Mr. Dean Smith. It regards the economic uses of Department of Water and Power land in the valley. There are agricultural uses on leased lands, which are considerable, in the valley. There has been quite a lot of criticism by various people about the use of water for agriculture. I would like to ask Dean Smith if you could give us some idea of the percentage of water actually used by these lands, and how much of it is used for pastoral lands or wildlife communities. What is the actual percentage of that agricultural use?

Smith: Well, I mentioned 5 acre-feet and 3.5 acre-feet and there are some places where they only use 2.5 acre-feet. Where 5 acre-feet is used, for reasons of distribution systems, the water is used very inefficiently. Where 5 acre-feet is used, I would say that probably 40% of it ends up back in the waterways, whereever it goes - back into the aquaduct or whereever.

(Man): Well, under flood irrigation it is very hard to leave more than 60%...a lot of our meadows...

(Short gap in tapes)

Cope: ...development of solar energy. This can be adapted to desalinization if they have this particular solar energy adaptation worked out again... from the rest of the world, it is because their water is much more scarce and has much more value, so desalinization is competitive with whatever meager sources of water they have.

(Man): I always thought power companies sort of suppressed solar energy because they can't sell the sun.

Cope: To be sure, they have restricted the research on it.

Mason?: May I ask you a cynical question? Have you tried ever in recent years to buy any pure copper sheets?

Man: They are impossible...not impossible, but they are expensive because they are for some reason or other...

Mason: Because they compete with oil. There is the answer to your question.

Martin: We have time for one more question.

Woman: The State Department of Water Resources Control (Board) has met resistance on the part of the water agencies to reclaim water because they do not want to compete with their sale of fresh water. There is

another thing on the competitive basis. As long as our water has been cheap the cost of the reclaimed water has not been able to compete with the cost of the fresh water, so that reclamation will never make any progress until there is a better balance on the cost of the reclaimed water.

Cope: There is another factor, of course. The constraints put on the use of reclaimed water by the State Department of Health. One of the major uses of reclaimed water is as groundwater recharge, and for this use the State Dept. of Health has put a great restriction on its use. They are not satisfied that they can meet the requirements of controlling the virus and the stable organics sufficiently.

O'Connor: I do not have a question, but I do have a comment. In our efforts to get somebody from the city itself to come and be on this panel and speak to the needs of the water in Los Angeles, we have spoken with several people in Councilman Joel Wach's office. From there we went to the Planning Dept. We thought maybe the Planning Dept. would be the next place to go because they would have some idea who did need the water in Los Angeles. One of the statements that was made to me when I suggested that would be a good place to go, was, "Gosh, the Planning Dept. had no idea how much water they needed in Los Angeles. All they know is that when you turn on the tap, water comes out." I thought that was appalling.

Martin: On that note, we will end our discussion of "Who Needs the Water?"

WHO'S IN CHARGE HERE?

Lois Ewen: I am Lois Ewen. I am the State Director of Land Use and Energy for the League of Women Voters, and I also have another duty. I am Vice-Chairman of the State Coastal Commission. While that is far removed from the Owens Valley, we are still dealing with land use conflicts and water, which are the two main issues we have here in the valley. So, our planning focus is very similar.

I have been very impressed. I have found that two concurrent themes seem to have been running through this morning's discussions, at least for me. One that emerged is that the decisions, and it may be a rather negative point of view, that decisions which affect local areas are very often made by decision-makers far-removed from that local area. Whatever the decision, the area affected does not always have the say in the decisions made upon it. I think that is one point of view which emerged this morning. Another point of view is that committee local citizens and governmental entities demonstrating a willingness to work together can effect change and an equitable resolution of land use conflicts. I think we have heard a very tentative surfacing of that desire this morning. Maybe by getting all of us together we can get the ball rolling towards some coordination and some integration of the eneromous problems that lie here which tie this area with the entire state, and, for that matter, the nation. Water is a universal problem; energy is a universal problem. The decision that we must take, the alternative solutions that we must make, can be made by all of us. I think that is the direction which most reasnable people wish to go in. Taking that vein, we have assembled a panel here this afternoon of both citizens and government - three levels of government for that matter - federal, state, and local regional governments, and private citizens.

Before we begin, I want to make sure that this is correctly stated for all because of the pending law suit in the valley, which I certainly will not go into; I think you are all aware of that suit. The League has sought and received assurances from all of the litigants that nothing said here today will be used for or against either of the opposing sides. To be perfectly clear, I am going to ask those "combatants". Mr. Rossman, is that not so?

Mr. Rossman: That is affirmative.

Ewen: Mr. Wickser?

Mr. Wickser: Yes, that is correct.

Ewen: Thank you very much. I would like to introduce Mr. Tony Rossman, who is well known to you here in the valley area. Mr. Rossman has been involved in state government and has been a very active attorney in environmental law in private practice. He now has his own private practice operating out of Sacramento. Mr. Tony Rossman:

Mr. Rossman: Thank you Lois. I should say that I got to know Lois Ewen when I was public advisor to the State Public Energy Commission and she in

essence gave me a description of her official duties. I would just like to say that although I cannot say under the penalty of perjury that I have seen it happen, I would not be surprised to learn that she could walk on water! To her right, of course, is a representative of that agency that could produce the water. Let me say with respect to the stipulation which we have just entered, I think that it is very important that this type of gathering be a free intellectual exchange. While on the one hand, the County and the City are committing themselves not to use anything for or against each other in the litigation, I hope that will encourage members of the audience to ask full and frank questions of the litigants. You certainly be entitled to an answer.

Now, the topic is, according to the agenda, "Water Law in the Owens-Mono Basin". Within the time alloted, I will stick to that topic, although if a few moments remain I would like to get into things which might be considered not water law but perhaps even more important, measures of law which relate to the future of these basins. In a nutshell, I will summarize many centuries of common and statutory law in a few moments, common law in Great Britain and as it came to our country in the eastern United States. A water right is generally something that someone obtained by living next to a river; hence, this was called a riperian right, a right to take from the river a proportion of that water equivalent to your ownership interest that you share with others in the river. In the western United States, that was deemed to be not the best way. As the development of our states at the end of the last century progressed, water was scarce. If everyone along a scarce waterbank took a riperian share, nobody would have enough to do anything by way of economic development. So we have the doctrine of appropriation, which in a nutshell says, "first in time, first in right". The first person who gets the water and who puts it to beneficial use, is the owner of it. It was precisely that type of right that the City of Los Angeles exercised after Mr. Waterton and Mr. Eaton purchased land along the Owens Valley and then filed for 1,000 cubic feet per second at Charley's Butte, thereby laying the Department's legal claim to the water that flows in the Owens River. Over the years, of course, they have purchased the lands in the valley, to where now the Department owns something like 98% of the nonfederal lands along the valley floor. With the purchase of that land has also come the purchase of the groundwater as well as the riperian rights. Now, that is the simple unembellished law of water in virtually all of the United States - either riperian, appropriation, or some combination thereof.

In California, however, there are three distinct doctrines or laws which have developed over the last 50 years which have largely been ignored by the courts with one exception; I would say two exceptions, the last one coming in a decision we received only yesterday. The first of those doctrines grew out of the drought that this state experienced in 1924 and the further fact that the courts of California were interpreting the appropriation doctrine in such a way as to "first in time, first in right" to freeze out any subsequent development, regardless of how much more beneficial the subsequent development was and regardless of whether the first person really had use for the water, really needed it, or was really wasting it. Thus the electorate of this state, in 1928, wrote into the Constitution of our state, language which has not received much attention except for the last few years. This reads, as it should, somewhat like the Book of Genesis:

> "It is hereby declared that because of conditions prevailing in this state, the general welfare requires that the water resources of the state be put to beneficial use, to the fullest extent to which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented and that the conservation of waters it to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."

That is now in our State Constitution. It now appears as Article 10, Section 2.

At the time it was before the electorate for adoption it was recognized as the potential redefinition of water rights; that because one was first in time he was not necessarily first in right. In fact, as a law professor who participated in the drafting of that section explained, a prior owner might have to give up his prior right or share with future development, so that future development might also succeed as well as the first appropriation. More importantly, the measure says that it shall be self-executed. It does not require the act of a legislature to implement this constitutional provision. About the same time in our state's history when that doctrine was developing there was also another doctrine in the state of Florida. That doctrine we now call the "area of origin", but at the time it was called the "county of origin". Ironically, as a professor at the University of Washington has pointed out, it is this valley and the experience that you face at the hands of the Department of Water and Power that gave rise to the right of that doctinre in our state. What that doctrine essentially said initially was that in actions involving the state of California, where the state is making a claim to the otherwise-unappropriated water resources, no more should be taken from the county in which that water originated as to exceed the amount that county would need for its own purposes.

Why was that doctrine enacted into our law? Professor Johnston says as follows:

> "The Owens Valley experience installed great fear in the minds of Californians living in other potential areas of origin. They feared that the continued growth of the Los Angeles metropolitan area and similar areas would result in the eventual loss of their water rights, drying up of their lands, and destruction of their businesses."

That motivation became law in a very narrow way in 1931. It was later extended when the State Legislature created the Central Valley Project to cover that Project as well, and most recently was written into the law by which the State Water Project was brought into being. The state aquaduct, which as you know, is the system running essentially from the Feather River in the north through the Tehachapis and into the Metropolitan Water District, is governed by that area-of-origin doctrine, which says, "The areas of origin shall be protected first before water is extracted from them." The final doctrine, and the one that has proved to be of most importance to this county, is embodied in the California Environmental Quality Act, which the legislature enacted in 1970. That Act did two things. Superficially, it required the preparation of Environmental Impact Reports on all projects which may have a significant effect on the environment. More fundamentally, however, CEQA, as it is known by lawyers, stated policy that environmental protection shall be the guiding criteria in decisions which government makes henceforth. In this county District Attorney Buck Gibbens and his predecessor Frank Fowles, brought one of the first cases under that law to require that the Department of Water and

Power prepares an EIR on their project of increasing the groundwater pumping and using that increase to fill the second barrel to Los Angeles. You all realize what happened in that case. The Court of Appeals exercised original jurisdiction and ruled in the county's favor. It said that whereas the second aquaduct is built and finished, and fixed, the use of that acqueduct is an ongoing project and the groundwater pumping project is not fixed, and therefore you shall prepare an adequate EIR on the groundwater pumping program.

Without getting into too much of the details of the litigation, the City spent three years preparing their EIR, choosing to define the project very narrowly as only an increase in groundwater pumping over that which they anticipated they would do when they designed the second barrel. The County countered that the court did not mean that, but what the court said is that the entire groundwater pumping program and alternatives to it which include no groundwater pumping and the purchase of additional waters for use in Los Angeles, or more importantly, the use of conservation in Los Angeles to make up for the groundwater pumping, all had to be covered in an EIR. That basic issue is the one now under submission to the court. But not, however, before the court last summer forcefully reasserted its original jurisdiction and set a pumping rate to govern the groundwater pumping in this basin. What has happened since then?

The City, I believe some two or three weeks ago, filed a motion with the court asking that they be allowed to double the rate of groundwater extraction and essentially carry out their full program. Keep in mind this was without the court's having ruled on the adequacy of their EIR. In fact, it was after the presiding justice of the court made clear at oral argument last month that the city had not complied with CEQA. The presiding judge said to the city attorney, "In my view, you have not prepared an adequate EIR. You have defined your project narrowly and in a way that cannot find support in this court's earlier decision." We are awaiting the opinion. Now, if the county had merely contested the inadequacy of the EIR...we have not done so. We have also contested the basic substance of the city's decision. We have assumed for purposes of argument that an adequate EIR has been prepared. We have said, even so, under these doctrines I have described, the duty to protect the environment above all, the duty to leave in the area of origin sufficient waters to protect the area of origin, and most importnatly, the duty to conserve water as a prerequisite to developing new sources, all render illegal the Department's decision to pump groundwater at the level they have proposed.

We filed our opposition to the city's motion on Monday. On Thursday the Court of Appeal, in an extremely extraordinary manner, issued a decision, some of which I would like to read to you because it is really almost poetry to see what the court has done in this most extraordinary decision. Madame Timekeeper, I realize I am going to run over and I ask the unanimous consent of all. I must say that it has only been in the last hour that we have seen the official decision and some of you to whom we last night distributed unofficial copies, will be interested in getting the official decision; we have copies here.

The court noted the histories I have just recited and the court also noted that it did have the power to modify its previous injunction, if, as the city alleged, the drought in this state did in fact require that in the interest of justice. Ordinarily the court would not rule on a matter like this until they had placed it on the calendar for full arguments; then they would send out their decision. Normally it would take weeks, or even months. However, wrote the court, because of the public importance of its ruling and the impact it would have on the management of not

only Los Angeles systems but other water agencies, it is advisable, in the court's words, to furnish the parties and their attorneys with an early statement of our tentative reaction to the city's request. Hence, this preliminary memorandum. It then recites the fact that the city has attempted to justify its motion on the grounds that there is a drought and it would cost more to buy the water from the Metropolitan District. It also describes the city's water conservation program, e.g. distribution of Captain Hydro coloring books and a Conservation Speaker's Bureau and a consultation group available during the city's normal hours, with a stated reduction goal of 10% by voluntary conservation.

I would really like to read the next two full paragraphs of the court's decision because in my view, if this does become final, this valley can take pride for not only having protected itself but given our state a redefinition of how we are going to look at water, how we are going to look at resources generally as they become more scarce, to meet the needs of all our people. The court's holding is as follows. "In relation to the state's current water crisis, the effort at voluntary water conservation is inadequate to justify the requested relief. The California Constitution adjures the waste of water and seeks its conservation in the interest of the state's entire population." I will pause to say here that that is the first time the court has ever interpreted the California Constitution provision as requiring conservation by the state as a whole, and essentially precluding one area of the state from saying, "I am safe, so I can ignore the problem because I have adequate water". "When the state's water resources dwindle the constitutional demands grow stringent and compelling to the end that scarcity and personal sacrifice be shared as largely as possible among the state's inhabitants. We postulate no fixed mathematical goal, and our only pursuasion on that score is our strong belief that a 10% reduction is inadequate when viewed in justoposition to current statewide scarcity." The court then recites, just to summarize, the fact that the Department can purchase additional water from the Metropolitan Water District and that they might have to pay a little more for it. The court's response: "'The likelihood that increased resort to MWD water may increase rates charged to customers of the DWP is not sufficient reason to invoke the court's (??) power. The city appears to have (an) available supply of water sufficient to meet its needs in a time of drought. Unless and until the municipal government of L.A. installs and implements methods which are predictably capable of achieving substantial water savings and demonstrates a need for water, rather than rate preservation, its motion for leave to extract additional underground water from the Owens Valley is not likely to achieve success."

Now, I am not going to have time to go into the other areas of law. Perhaps we can do that during the discussion period with the audience. I hope you will all ask questions about land use, air quality, and the like. I would like to make one comment. This is a preliminary memorandum. It is likely that the court may change its mind, although I don't read the court as saying that it is open to any change on materials, but rather as to whether 10% or some other figure may satisfy them. We are going to work very hard to make this the law of California. I think what the court did today in a very precise and legal way, was to answer the question that Mr. Stone put to us this morning. This water belongs to all the people. That, I believe, is the court's message.

Ewen: Thank you, Tony. I think you can see why he is considered a very agressive attorney. Next I would like to introduce one of the governmental levels, one of the governmental bodies that we have been discussing here and this will be represented on a local-regional scale by your supervisor from Inyo County, Wilma Muth, who also happens to be a League member. We are extremely proud of her.

Ms. Muth: Thank you. Now, ladies and gentlemen, do you see why we hired him? You have just heard from Tony Rossman some of the ramifications of water law as it applies to the Owens Valley and I would like to briefly tell you how Inyo County fits into the picture. No. 1, I want to identify with you that the Inyo County Board of Supervisors is elected by the people of the County of Inyo. You people who out there this morning expressed concern, who asked questions of the panels before, are all the people we represent, all five Board members of us. Anything that is of concern to you is of even greater concern to us because we are your elected spokesmen.

Inyo County is a general law county operating under the government code of the State of California. It has little flexibility in some of its decision-making powers. The county and other local governmental units, such as the city, usually have only two decisions to make on water-related planning programs. That is land use and development, and water supply and disposal. However the state and federal policies impact these decisions with 1), the environmental protection criteria, and 2) water allocation decisions that are set down by the State Water Resources Board pursuant to the California Water Code.

Now, because of the unusual ownership of lands in the county, and particularly here in the Owens Valley, some of the actual control of the land use has been a little fuzzily defined. The Forest Service and the Bureau of Land Management, and particularly the Department of Water and Power own 98% of the valley floor of Inyo County. This leaves very little in the private area over which in the past the Board of Supervisors has had direct control of land use planning. The Organic Act, which has just been passed by the congress, gives us a little more input into the decision making on land use palnning of the withdrawn federal lands. We have gone into comprehensive land use planning now, and have included DWP lands more specifically than in the past. The DWP owns over 275,000 acres here in the valley floor. The Board of Supervisors seems to be really frustrated sometimes because every time we need land for public sites, public parks, sewer ponds, solid waste disposal sites, we always have to go through the DWP to get its o.k. to have it on that particular site. The use of water and the needs of the Owens Basin has, I think, been well defined by the previous panelists. I want to really emphasize to all of you that the Board of Supervisors recognize it is their responsibility as your elected official body to protect and enhance the natural resources of the land, the air, and the water, which makes the total environment of the citizens of this county.

Mr. Rossman has outlined in the state water plan the fact that the water, both surface and underground, belongs to the State of California, and the area of origin should have the first use of that water. We have now reached a point where it seems as though the only way that the County of Inyo can bring about the citizens' wishes is by going to court. When it comes down to who actually is in charge here, the County of Inyo is now engaged in this great court battle to determine if we the citizens of the County of Inyo are to have equal control of our valley's destiny or whether that control will rest solely in the self-serving hands of an autonomous governmental entity which lies 300 miles south of us. I wish it were 3000 miles!

Ewen: Next, I would like to introduce whom I feel has been long-suffering here today. You have not heard from the other side and I think it's high time we did. The gentleman is the representative of the Los Angeles Department of Water and Power, the resident engineer, Jim Wickser.

Mr. Wickser: Thank you Lois. I think that I feel now that I know how the pig felt going to the luau. If I had an apple in my mouth, I would be...I appreciate the kind words from Wilma. It is about the nicest thing she has said about us in the last couple of months.

I am a little confused about the title, "Who's In Charge Here?". I don't quite understand what it means. I guess it is probably a basic fundamental question that does need answering, though, because I have lived here four years and I have had great difficulty finding out who is in charge. I have had great difficulty in finding a unified consensus opinion on which direction this county wants to go. I think we feel that we serve a very useful purpose here in the county as being the grandiose scapegoat. No matter which view somebody has, they can always point to us as being "agin" it. It happens frequently, as many of you in this room know. I think the League's program here, Who's In Charge Here?, is probably the most fundamental question that needs to be answered today. If we can reach an answer as to who is in charge here, then I think we can find out who we have to talk to to get something done.

Much has been talked about water and I will not attempt to deal with Mr. Rossman and water law, by any means. For an attorney I think he did a reasonably accurate job of it. I think, though, the land management aspects are something we perhaps have more immediate control on right now than we have had on the water issue. The water issue is in litigation and it is really something that nothing is going to happen on right now through negotiation until the court proceedings are concluded. Land issues can be worked on immediately. So, when we get back to who's in charge here, we are happy to find out and work with whoever's in charge here. I do quote, though, from a 1972 letter from the County Board of Supervisors which states, "Your preliminary briefing on land management is generally concurred with by the County Board of Supervisors". So it sounds like we are not too far off on land management. Why don't we work and try to get something going on that. Thank you.

Ewen: Next we have another very important governmental body which makes decisions on the valley, and that is the federal government.. As you have heard, the federal government has considerable stakes in valley decisions. I would like you to meet Bob Rice, who is the Supervisor of Inyo National Forest.

Mr. Rice: Thank you Lois. Can everyone hear me back there? I would like to go up to the maps and talk from them shortly. Taking a look at the panel up here and some of the things we have heard so far, and again taking a lead from the National Environmental Policy Act and the California Environmental Quality Act, it should be obvious that we are an interdisciplinary group. In the newspaper article announcing this conference, reference was made to the purpose being to explore the water issue in the Inyo and Owens Valley area, from both sides. As I prepared for this particular 5 minute session those six words really kept surfacing in my mind - water issue, both sides, and federal government. I have resolved these, at least in my viewpoint, into a presentation that will focus on the government's presence,the federal government's presence, rights,

supply, and consumption, and then reaching way back into a Trumanism - where does the buck stop? or, who's in charge here?

The federal presence, as has already been mentioned a couple of times, in the Mono - Owens Valley area, I think I can best describe by referring to these maps. If I could stack this one on top of this, it would give you a pretty good representation of the Mono - Owens Valley basin, Mono Lake being up here at the top of course, and then continuing on down southward to Owens Valley here, Owens Lake here, and then even beyond that on into the Kennedy Meadows area almost to where Louisiana Pacific has their sawmill at Inyokern. The two shades of green, the lighter green and the darker green, is that land administered by the National Forest, and the red or shade of red, if you will, is that land which is adminstered by the Bureau of Land Management. They are the two major federal land holdings in the two basins from which we are speaking. That represents, in Inyo and Mono Counties, something like 4½ million acres of land. In a normal year, the annual runoff from that acreage represents about 600 cubic feet per second, which is sufficient to maintain a city of about 12 million people. It feeds 900 lakes and something like 2000 miles of stream. Through this system of natural lakes and streams, water goes into the Los Angeles acqueduct system which generally originates in the lands in yellow on this particular map, and then passes on down through. I think that kind of gives you a brief orientation on some of the relationships that we have on the snowpack to the consumptive use in the south. Essentially, 80% of the water produced on that 4½ million acres of land services the City of Los Angeles.

Now, in a small way we can effect the supply of this water. You have heard one recently in the newspaper which is a system of cloud seeding. Again, cloud seeding when it is done over public lands generally requires the approval of the Forest Service or the BLM. In this case the endorsement of that program was done through our office here in Bishop. Another opportunity where we can improve the supply of water is through some type of vegetation manipulation, either by burning or by manipulating the vegetation through some kind of harvesting practice. This permits us to store snow in the shaded areas and delays the runoff in the spring. Then another way, of course, is one that you are very familiar with, and that is a series of check dams and reservoirs. While we are not in the reservoir business, we do have a number of dams, small dams, to check the flow of water in the spring so as to minimize the runoff. As far as allocation, I do want to get into a little bit of the federal water rights. As we move out of the state and into the federal lands we have some similar doctrines. History is full of incidences where there have been great disagreements between states and federal landholders on who has the rights to the water on federal lands. Probably the most popular one, or the one that is most knowledgeable, is that called the Reserve Right Doctrine. It is very similar to what Jim had to say in that the area of origin is on the National Forest land or the BLM and the federal government then controls the allocation and use of that water. The Supreme Court made that decision and dates it back to the date that the federal land was proclimated and in the case of the Inyo National Forest, it is 1893. Any appropriate right exercised after 1893 that pertains to federal land then must be endorsed or approved by the Forest Service, in this case, or the BLM in the case of BLM land. Fortunately, or unfortunately, depending on your interest, quantification, or how much to reserve, was never really resolved.

It is pretty important to us because it pertains to nonconsumptive uses more than to consumptive uses. Today there are a number of actions still in courts to try to determine how to quantify water for nonconsumptive

uses. Those types of uses include livestock, fish and wildlife, recreation, and of course the needs of vegetation. Finally authority, control, where does the buck stop, how does it affect you and me? Congress, through its actions, and Wilman mentioned one of them pertaining to the BLM, another is the National Forest Management Act which was also passed last year, pretty much sets the stage of how National Forest lands are managed. Your participation is through the development and making of these laws and it is also through the participation in hearings, community forums, meetings, and the courts. These, once they are established, are implemented and enforced by the land management head who has the responsibility locally for that particular area. In the case of the BLM it is the District Manager; he is located in Bakersfield. In the case of the Forest Service it is the Forest Supervisor. Now, I am not an expert on water laws, but I have been involved in quite a few of them. I will try to answer any questions later that you might have pertaining to some of the doctrines that relate to federal lands. If there are any matters that you wish to discuss on the BLM lands I am going to have defer them or get you an answer, but I will be glad to talk to you about anything that pertains to the Inyo National Forest.

Ewen: Thank you very much. I think I've been perhaps a little generous in time, but these are the very issues that you wish to hear discussed from the decision makers in various roles of government. It may be that we can sort of cut down on our break-time that we have later on in the afternoon. I think that what we are hearing today is valuable and I am sure that you will agree with me. I would like then to turn to the State of California. Mr. Guy Fairchild is from the Director's staff, the Policy Office of the Department of Water Resources, and he will discuss the state's role in this concern.

Mr. Fairchild: Thank you Lois. With the stimulating reports that I have been hearing today, I am properly stimulated and ready to dash off in all directions. I think this is a tremendous conference - anytime you can get 200 people to come out to talk about an issue, there is no question about the interest in the community. The League, as usual, and as has been commented here before, has very appropriately timed this following the day after the Court of Appeals. I also want to point out one other significant fact and that is that they had considerable rain and snowfall in the Los Angeles area yesterday. In fact, in reading the paper last night, it said that the precipitation in the L.A. basin is approaching 10 inches, while in Sacramento we only have something like over 5 inches. They have 80% more precipitation in L.A. than in Sacramento and maybe that is a trend too. Maybe we will have to get the California acqueduct running backwards and that will resolve the problem! In my experience, the League is all-powerful and I wouldn't put it past them.

I do agree with all the statements that have been made here today. Probably the most profound thing I can say is "Me too". I even agree with the gentleman who talked about ignorant engineers. I would say that in the engineering profession we have as many ignoramuses as any of the other professions. We are like the attorneys in that we are just kind of hired guns. Politicians or somebody is setting the policy and what we are doing is what we are paid to do. I have worked under five governors in California. We have had 5 different administrative policies. I have done the best I could to carry out those policies. They're constantly changing; as far as I am concerned they are changing for the better. Just to emphasize that a little bit, when I first started to work for the state, you went out and you located the source of water and you figured

out the cheapest way to get it down here so you could use it. That is the way I started 30 years ago. Some of the milestones that I have clicked off in this 30 year period are: I spent 2 years, believe it or not, on the middle fork of the Feather River as the Department's representative; the Department was the Fish and Game, the principal agency that had the middle fork of the Feather River set aside as a wild river. We went on from there getting fish, wildlife, recreation values established as purposes of the project. Slowly we were evolving a process that was not single-purpose, that was concerned with the populace as a whole. We got down to the status where we are now in the present administration, and believe me, the present administration is very concerned on a broad range of values. They are as concerned about social and environmental values as they are about economic values. I would no more be able to get a report through without full consideration to these values than nothing. It is standard established department policy that we give full consideration. In talking today, somebody said three levels of government. We think of it as four - you have the fderal, the state, the local, and then we have the citizens - the most important group. All of our studies now are conducted with citizens' advisory groups. We think that this is very important. Things we are emphasizing are conservation of water, conjunctive use, re-use of supplies, and the whole gamut of how to better manage and utilize what we have.

We have selected ten areas of the state, of which this is one, where we think there are significant water problems that we can contribute towards. Dick Angeles, who is backing me up in the audience here, from our 7th District Office, is the one who is responsible for the study in this area. You can talk to Dick later; perhaps he will be on the panel tomorrow. He is the guy who can tell you what we are really doing specifically in this area. Now one of the things I will close with is that the most important single thing that you can ask yourself as you go through this process of "What do you want to do?" is to ask yourself "What are the alternatives?" I agree with Dr. Eadington when he says to make "an honest evaluation". Constantly ask yourself that on every issue that comes up. If you properly define the alternatives and give enough data, then you will have something to make a decisionon. It disturbs me to hear this talk about saving 14% water, savings 20% water, and so on. We need actual information before we can come out and make those statements. I appreciate being here. Thank you.

Ewen: Thank you. Now we have a representative from what I consider to be a bridge between the various levels of government - the three that I mentioned and the 4th from Mr. Fairchild - the media. We have representatives here today, and we also have on on the panel, from the press. This is Mr. John Heston, Eastern Sierra News Service, and he interprets the decisions for the public to read. Mr. Heston:

Mr. Heston: I will not go too far here into the philosophy of the press or its place in the community. I guess that is more Dr. Sommer's area, but the abstract principle behind the press is important. It stems from a basic thing in man, and that is his need to know. As man looks out of his skull at a tree or at public events, or anything else, he is always questioning. Now we are aware that events take place outside of our immediate presence. The press fills this gap. Years ago this need was seen. It was seen in the hieroglyphics of Egypt, in the town crier, by the storytellers of China.

Well, the philosophers of the ages, great men of great minds, recognizing this natural need in man, formed in this country a particularly

guarded condition in which the press could exist. Thus we have the First Amendment of the Constitution. I call your attention to the fact that it is the first, because without it, without information, the public cannot function in a democratic society. Now, getting away from abstract ideas, we must find a practical application of this in our society, and indeed in this valley.

It is a four-part system. We have the electorate, the people as it were, the groundbase thought process. We have the business community, and we have the elected officials and the law. The press is a part of this. You will notice in any democratic society if any one of these gains too much power or control within its own area, the entire mass suffers and it all winds up where the courts have the power. That is what has happened here. Mr. Wickser said a while ago something about a consensus - he cannot find a consensus. Well, I think as a working reporter in this county for some time, why that consensus does not exist. I think in fact there have been deliberate attempts to fragment the society. I think there have been deliberate attempts to fragment the press, and like it or not, they have been successful. A strong press out of control is damaging to a society. I have seen it happen. I have worked for a Scripps-Howard paper in a metropolitan area; I have seen a town, several towns, where the press had too much power. I have seen towns where the government had too much power, and I have seen in other countries anarchy where the people fragmented, had too much power, and there was chaos. At this point we can only say that if the press is too strong the people are weakened. Their minds are bent in a certain direction. I have yet to find any proper need or use of an editorial as such, and I have been a newsman since I was 15. I think, and I have a basic faith in the judgement of the people, that if they are merely informed truthfully, if all their views are presented equally, if they are even halfway intelligent, that is sufficient.

But there has been a breakdown in this county of the four-part system. The press in the first place must have the support of the people, must have the support of the business community. I have seen some terrible cases where the community has not given that support and the press has been weakened. Now in this fight in the past 3 or 4 years you have needed a strong press; you haven't had it. The press is especially fragmented right now. I will not go into those purely personal issues. Let's say that I am a reporter that feels that I have been slapped in the face and I haven't yet discovered how I am going to react intelligently.

Encourage your press in every fight to present not just the truth but all of the truth. The truth on a public issue that is unwritten or unspoken is the biggest lie of all. Thank you very much.

Ewen: Thank you Mr. Heston. And now, the subject really of today's discussion and possibly tomorrow's discussion as well, the person must affected by all governmental decisions - the individual. Representing the individual's point of view is Dr. Gunter Sommer, who is a Visiting Professor of Philosophy and Religion at Deep Springs College. Dr. Sommer:

Dr. Sommer: I was so struck by the way my neighbor ended that I forgot almost everything esle that I had down here. He made me think of something that one of your philosophers I respect once wrote. His name is Charles S. Pierce. He said something like "...the true benefactors of mankind have never spoken". I missed his line; it's a truly fine line. He concludes, the main problem in coming out with what you think is most needed for our chances of doing well is not so much the fear of external persecution,

that someone will not like it and those in charge of your job will not like it, etc. The greatest of persecutions that sets in then is the one within, and this is what I thought of when he said...

Heston: A necessary truth that is unspoken or unwritten by the press is the biggest lie of all.

Sommer: What he says here for the press goes for me as an individual also. So I tremble at this point for within me there are also many of these contending forces just as they might be or most likely are in you. What shall I speak, what shall I say, what shall I stand for?

A friend over there comforted me a while ago and said don't worry so much. The most important thing today is that you went through this process of preparing yourself, of thinking, of being a part of it, and so on. I think this is true for all of us. Yet what I want to say, and I am coming back to some of those things I had jotted down; it is hard to say anything - who is in charge here? The answers, both the easy ones and the uneasy ones, are so obvious. Certainly, God is in charge here, and the devil some, we could say. Or we could say the exploiters are in charge here. The exploiters are in charge here to take from others, or who pretend to help by taking from others something which they destroy, giving to another someone at the cost of destruction. I could illustrate also the way I feel and I have been here only a few years. It seems there is a scene where the destroyers are in charge. The answer is blowing the water, the answer is blowing in the wind south of us; our main lake is blowing in the wind. Seven years ago when I came the main lake north of us was still intact, as far as I as a newcomer, an ignoramus in details of this matter, could see. Now it no longer is intact, and soon will also blow as an answer in this direction. But then the question is, can a program be in control of anything that is destructive? Can a person that has no self-discipline, not one superimposed on it by others, truly be in charge and incontrol of anything if he cannot control the passions or irrationalities in his own life, then there can be at most a seeming control. I won't make it that easy for myself. Bascially I believe that the seeming or the appearance or what further east they call the Maya - that the seeming appearance and what is, belong together, are correlated; it is like my saying, in view of one who spoke this morning about the times before us and our forefathers before us too, there is the eagle appearing but there is also the spirit eagle. Now if we make a stupid distinction between the two that we sometimes make, then you will have what thank goodness you do not have yet; you will have no more eagles pretty soon, no longer this magnificent water that you still have. You still have living water, which means that where the algae feel good the fish do all right, I can drink it. That is how I use and would ultimately use the word "living water" and not allow myself to get too allegorical or too poetical. We have done a lot of this and it hasn't served us that well. I am also most impressed by those of us who have the strength to strike the note of balance at this time. There is a tremendous imbalance in this valley with regard to who is in charge. There is no-one in balance. You are controlled by those who do not reside here. I once had the illusion that at least something is untouchable and that is the groundwater. The groundwater does not come with the land. I do not know much of many of the details, and they often contradict the great ambitions and generalizations we might have. Thank you.

Ewen: Now has come the time for a very brief response by panel members to what they have heard. We will lead off with Mr. Rossman. Two minutes, Mr. Rossman!

Rossman: First, with respect to an observation of Wilma's. Water belongs to the state. In an allegorical sense that is true. I think that is the thrust of the court's opinion, that in the management of this water the nominal owner, which for purposes of argument we will concede to be the City of Los Angeles, has to act in the state's overall interest. That is why I think the court has said, that is what the California courts have said previously in dicta when they say that those who operate water in this state serve as trustees of a public resource. But the significant thing about CEQA and about the State Constitution and the area of origin doctrine is that you do not have to own the water to insist upon its reasonable use. What is at issue is not that Los Angeles does not own the water, but how shall they exercise that ownership right reasonably. The county of origin doctrine, by the way, does not statutorily apply to this basin. We have asked the court to recognize it as an equitable principle which should be applied and that is asking for quite a bit. We have no indication from them on that, and I want to caution you that if we win that, that is not the right to say, "Well, we've got it and we're going to waste it or be unreasonable with it, and Los Angeles gets the rest of it." The same duty of reasonable and nonwasteful use which we are now enforcing on L.A. must first apply here. With Bob on the federal legislation, if we want to get into that, there are some technical points that are interesting because when Congress withdrew the lands and when Congress gave persmission for them to build the aqueduct they provided that California law shall govern. What that means in relation to some of the federal doctrines of reserve rights, shall we say that is going to be a lawyer's delight to figure out at some point. With respect to Department of Water and Power on factual information I couldn't agree more and am grateful that now at long last, DWP through the Inyo-Mono study group has brought forth its first figures on water conservation potential in Los Angeles. I only hope that the state will now recognize that what the County of Inyo has had to do on its own is what the state should have been doing all along, and also enforcing the state's constitutional provisions in the court. One last word...

Stella Josephs ___ Stop. Your time is up. It is not fair to everybody else. Now, stop trying to dominate!

Muth: I have to agree with you Stella, except that he was also giving a lot of the County of Inyo's views on the law. I do want to emphasize the fact that while I had heard a lot about the individual's rights and the fact that the people are the ones who in the long run are the governing body, are the ones who are in charge here in Inyo County, is that: 1) they are privy to vote for their elected officials on the County Board of Supervisors; 2) they can vote for the State Legislature; 3) they can vote for their congressional delegation; but no-one, absolutely no-one here in the County of Inyo has anything to say about the Department of Water Power, the City of Los Angeles - we have absolutely no representation.

Wickser: We have heard a lot of discussion about water conservation in the City of Los Angeles. It seems rather appropriate to consider water conservation in the Owens Mono basin. I think your League has studied water consumption in the communities here, and they are in the neighborhood of 4 to 5 times the per capita consumption in the Los Angeles area. The mayor of Los Angeles, Mayor Bradley, just addressed the Blue Ribbon Water Conservation Committee yesterday. You may have read part of it in the paper. He asked this committee to come up with a report within 45 to 50 days outlining a voluntary conservation program and also a mandatory program in the event that the voluntary conservation program did not meet the goals that are necessary. I think what is good for one is good for others. We have been stifled by the County of Inyo in trying to install water meters, which are the most effective means of coming up with water conservation. I find that rather hypocritical that they preach water conservation in L.A. and sue us for trying to install the most basic element in water conservation there is, that is the water meter. Let's all conserve water. I think it is very important. Our department has been pushing for this for 5 years. Unfortunately it has taken a drought to get any publicity at all in the Los Angeles media. So yes indeed, we all need to conserve.

Rice: First of all, my compliments to the League for putting this together. It is a marvelous session and I think you need to do more. I neglected to do that in my remarks. Secondly, let's have one on land use.

Ewen: I might say we have been involved up and down the state with another federal agency, which happens to be the Environmental Protection Agency. We are doing that statewide. I hope we can come back to this area. I believe the issues are here. We certainly demonstrated that today by bringing people out on the water issue. Now I have used up your time!

Fairchild: Well, I have nothing more to add but to restate what was just said. Who is in charge here are the people, the people are being heard now, they are getting involved in court decisions, they are getting involved in planning matters, and so on, so things are being done that they want. I encourage you to continue to express your views.

Heston: I will be happy to answer questions from the audience.

Ewen: I think we will probably have questions from the audience. Dr.?

Sommers: One point that I think has to be made is the point that it is not that simply that you can say "down there is the trouble". What would be the case if the people up here were totally in charge and had the responsibility. Would it be any better? One could argue and say, "well at least the proportions of abuse wouldn't be the same", and so on; or excessive use and abuse from me means paying no attention to those after us; or not being able to look beyond the smoke of our chimney, which also means beyond our human smoke. So when Mr. Rossman reports what we are enforcing in Los Angeles must first apply here. I think we will not have a good spirit in this whole matter to guide us if we do not keep what we preach, if we don't first enact it. If there is not something of a renewal of spirits, or whatever you will call it, and also of the universe, we can have pseudo-local spirits of those and also pseudo-universal things too. If there is not a renewal here in terms of our spirits then nothing basic can be resolved. I like that very much, that given

what we are trying to accomplish in Los Angeles must first apply here. Thank you.

Ewen: Do we have any other response from the panel to anything that has been said?

Rossman: I don't want to be selfish with time, but I think Jim raised on rebuttal a new matter which is not considered, and therefore I would like to rebut two claims of his - that there is unreasonably high use of water here and the county is suing to stop conservation because of the water meters. As Duane Georgeson admitted at one of the Inyo Mono study groups, those consumption figures for the Owens Valley towns are highly unreliable. They include discharge valves, which may not be accounted for, and the fact that the summertime population is much higher than the permanent population; thus these figures are not reliable.

Heston: I would like to say something here. Several months ago Bennett Kester and I went to Los Angeles at the request of some of the city officials who told us that they were willing to talk to us in an interview and answer our questions. I do not have my reporter's notes from that time nor do I have the 5½ hours of taped interview, but when it comes to this consumption thing, Mr. Masamura Kujima, the Mayor's Liason to the Department of Water and Power told me, in words to this effect although this is not a direct quote, the figures are correct; people in your area, due to the atmospheric conditions and to the type of ground, need 4 to 5 times as much water as one needs here in Los Angeles.

Rossman: One final point on the metering case. The county is not bringing that lawsuit because we don't believe in water meters. With the metering has come the attempt to charge at least as much, and in some cases more, in the Owens Valley for Owens Valley water than L.A. is charging its customers in L.A. for the same water. The final fact is that those rates are set, as Wilma explained, without your opportunity to participate in the rate setting; you would be accorded this opportunity if the rate were set by your local city council, as they are in L.A., or by the Public Utilities Commission, an impartial body. All that aside, I do think that one thing that the county can do, has done by resolution of its supervisors, but that I think you should be looking for, is what even better examples can you set on water conservation? Do not relish, do not flourish in the fact that you normally have all the water you need up here - set a good example for the rest of the state.

Ewen: I am going to allow one comment by Jim and then I am going to go to the audience because I know you have questions you want to ask and if we permit continued discussion, we won't have time for that. But remember, most of these individuals will be here this evening and tomorrow and I certainly hope you will approach them individually and speak to them on matters that concern you.

Wickser: I don't think it would serve a lot of purpose to debate with Mr. Rossman on these things. I would just as soon throw it open to questions and perhaps I can expand on the questions and try to get some facts back into the picture.

Ewen: Very good. Remember what we did this morning. Go to the microphone, please, because the tape does not pick up. It is my understanding that we will be coming forth with Proceedings and it is quite necessary that your question be on and that you identify yourself first, please.

Yan Kinney: I address my question to Jim Wickser. I have heard Duane Georgeson and news services say that 85% of California water goes to agricultural uses, and only 15% to industrial and domestic uses. My question is what % of water from Inyo Mono is sold to agricultural interests?

Wickser: We do not sell any of our agricultural water here in the Owens Valley. It is tied into the leased program. I assume you are not really talking about the water use here in the valley, but what goes to L.A. I think the agricultural use of water in the L.A. area is something in the magnitude of 1% of the water sold in L.A.; it is virtually nothing.

Dick Westmeir: I have two comments or questions. We talked about water metering, and I understand there is a court limitation on the groundwater that the City of Los Angeles can now pump. I wonder if that is metered or marked? Mr. Rossman?

Rossman: I think Jim could also answer. How do you keep track on the limitations? We have been doing so by requesting of the Department, and they have voluntarily complied, by sending us on a daily basis the readings they compile of how they operate the entire aquaduct system, which includes a listing of the number of pumps and how much volume is pumped. When I first started that, I then traced that back to how the records were kept at individual pumps. Quite frankly we are relying on the good faith and the honesty of the Department's records. That is not unreasonable. They need accurate figures to run their system intelligently. We are assuming that they are telling us the truth.

Westmeir: The other item I had has to do with water law. I think it might be interesting because a couple of things came up this morning about consumption, about the whole cycle of water. Apparently water law starts when it hits the ground in the west. One might think of things in the future where water law does not apply, like cloud seeding. Perhaps we will come up with a technology where no water falls on this side of the ridge of the Sierras and things like that. If anybody wants to address that, that is my last question.

Ewen: I would like to comment myself. You have probably already read that the State of Idaho is considering a lawsuit, litigation against a westerly neighbor who is thinking of going into cloud seeding. I think we have just seen the beginning of this kind of issue. So that is another problem to stir into the pot.

(Man?: The only comment that I would make is that I am very familiar with the legal concerns there are in cloud seeding and probably one of the reasons we don't take on the initiative of doing it, rather than evaluate it.

Randy Pester: In Thursday's local paper, the Inyo Independent, they brought out that the DWP says that water usage in L.A. has dropped 8% and right now they are using sewage flow rather than metering to determine this 8% decrease. As Louis H. Winnard explains, sewage flows which are based on uses of water inside homes andbuildings are relatively stable. Water consumption figures, on the other hand, are highly sensitive to air temperature, number of days since the last significant rainfall, wind, and weather. Now using the DWP figures for communities in the Owens Valley,

my own town of Independence is a good example. They say that the gallons per capital per day in Independence is 1335. Now it is hard to pinpoint these figures down, as we brought out the different constraints in determining these figures before. If we use the same type of theory that they are using in L.A. right now we can come up with the sewage treatment facility in Independence. The present flow in Independence is 80,000 gallons per day. That works out to 106 gallons per person in Independence. Now the design capacity of the treatment plant in Independence is 134,500. That works out to 176 gals. per person in Independence. So, if everybody was still on that treatment facility up in Independence right now, it would be using 175 gals. If we're using 1335 gals. like the DWP says, I would hate to see what would be happening. That is using the same theory that the DWP is using in L.A. right now.

Wickser: I think you misunderstood the intent of using sewer flow data for determining consumption. We have three meters to read to determine all the waste water going into three treatment plants. You can read that on a daily basis. To go around and read 630,000 water meters - it is not possible to do it on a daily basis. We are talking about only inside-the-house usage. When we talk in Independence about 1335 gals. per person per day, we are talking about inside-and outside-the-house usage.

Pester: I understand that these figures are for interior use. But it is usually about 70% of residential use for interior use. We can apply those figures to the Owens Valley. Now if you want to get into comparison between the Owens Valley and L.A. residential usage, then we should compare single family detached dwellings in the Owens Valley with single family detached dwellings in L.A.

Wickser: We do have some meter data in the valley - very sketchy because we don't have that many meters. On the meters we do have, it indicates a factor of four times what it is in L.A. in similar circumstances.

Pester: It is about 500 then, not a lucky number, right?

Wickser: About 800.

(Woman): I would like to direct this question to Mr. Fairchild. Indoor plumbing has been praised as one of the greatest inventions of modern man. It does use a great deal of water. I was wondering what the state's attitudes towards legalizing the use of waterless toilets, which are now legal in the states of Maine and Oregon, I believe. What is the State of California's attitudes towards this?

Fairchild: This is a public health question. I am not just trying to beat around the bush, but it is not something I would have control of and I am sure the Department of Public Health can provide you will all kinds of information. I don't know why, if it does an adequate job, it would not be acceptable. Public Health can provide you will all kinds of figures.

(Man?): I believe the Department of Housing and Community Development has authorized so-called K regulations for people who live in rural areas to use this type of decomposting waterless toilet. When you make proposals like that on a statewide basis, you would not believe the building inspectors and bureaucrats that come out of the woodwork. I think the place to focus your attention on that is the State Department of Housing and Community Development. They formulate the statewide standards which you

would want to see implemented. Fortunately, the State Architect, Sid Vanderin, specialized in creating those kinds of systems before he became State Architect.

Ewen: It is my understanding, and if Danella is still here she could correct me, that the governor signed a bill last August for installation of low-flush toilets in new construction in California; we are slowly but surely getting there.

Emily Martin: I have a follow-up question on the consumption figures. You are talking about interior figures, or interior usage. Then, that which is used outside the home on the lawns, I assume, goes back down into the groundwater basin and is at some point available for pumping or some use once again. That was something that popped into my mind while you were talking. I have something else I would like to say. As a person who has always believed in the free press and believed that the vitality of a democracy hinges on the kind of information that we citizens receive, I am very troubled by John Heston's ending. I would like some clarification on that and an understanding of what it is he is saying. John, your statement that the truth that is not written is the biggest lie of all is the thing I would like to hear more about.

Heston: Anybody charged with the responsibility of any area of the press must be responsive to the occurances and the conditions in the areas in which it circulates, whether it is radio or t.v. or newspaper. I think the individual reporter when he knows that there is a major issue going on should cover it in detail. I don't know that we get that kind of coverage up here. I will say this for those reporters who might hesitate to cover or publish such events. I can certainly understand why. You do so at your peril.

Martin: Do you believe that the particular situation affects the quality of decisions that we have made in land and water use here?

Heston: I think so. I think the press unifies those other three areas of the population - the government, the law, etc. - and I don't think it should try to lead or direct but I think it can be a consensus and I think that all the issues should be brought out so that people can have a free exchange of ideas. I am not alone in that. Can I read you something that I have gotten at considerable expense from my lawyer here recently. "Guarantees of freedom of speech and press are not designed to prevent censorship of press merely, but also to prevent any action of government by means of which it might prevent such free and general discussion of public matters as seems absolutely essential." That is a Supreme Court ruling of 1967; here is another, "A function of free speech is to invite dispute and it may best serve its high purpose when it induces a condition of unrest, creates dissatisfaction with conditions as they are, and even stirs people to anger." It would seem here that the Supreme Court is even encouraging the press to get some spine about it and come out and deal with these issues. The Supreme Court even encourages the news media.

Martin: We have missed your radio reports the last week.

Heston: Thank you. So have I.

Ewen: We have about 10 minutes left. I am sorry. Let's see if we can keep our questions and answers brief so that everyone may be heard.

Jock de Swart: Since the question of waterless toilets in regard to energy conservation has been raised, I have been in the process of trying to get them approved for the City of Los Angeles, through the jurisdictional agencies, the County Health Department; I'm reading from a letter from the County Health Department to me, basically, through Baxter Ward's office, "In areas where community sanitary sewage systems are available this department feels that the use of these kinds of systems," in other words waterless toilets, "are unnecessary since the sanitary sewer can safely handle all household sewage."

Ewen: That's not the intent! Does anyone have a comment?

Alan Schultz: I have a question here for Mr. Wickser. Earlier Cindy O'Connor mentioned that she tried to get someone from the City of Los Angeles to be here at that conference, and I am really troubled by what she said. I realize you may not be able to answer this comment because you are an engineer, but could you possibly give me an explanation of why they didn't feel it was necessary, or perhaps maybe they were sick, of why they couldn't come up here and answer some questions we have for them.

Wickser: The only one I could answer for is Mr. Winnard, our General Manager had a previous commitment, and Mr. Georgeson, the one he delegated it to, came down ill Friday afternoon. I do not know who Cindy talked to in City Hall.

O'Connor: I would like to make a distinction; we tried to get somebody from both the City itself and the Department of Water and Power. We felt both jurisdictions needed to be represented, and we didn't have any luck getting anybody further away than Independence, unfortunately. Well, Mr. Georgeson was due to come until yesterday afternoon, although on Thursday we did have some indication that he would not be able to make it. Our problem with the City had nothing to do with the DWP.

Wickser: I can no more answer for the City of Los Angeles than why the governor is not here.

Rossman: Can I make an observation here? I must confess that I am not only a resident of the City of Los Angeles but I live on Mulholland Drive! I got involved in environmental law by suing the City of Los Angeles, so they are just next in line. The City of Los Angeles is not the same thing as the DWP. I think the county and the state will be well-served to recognize that fact. Speaking as a citizen of L.A. I am personally, and many of my close friends who are politically active in L.A. personally, aside from my representing Inyo County, are disappointed and dismayed at the performance being done in my name as a citizen by the DWP. As the gentleman to my left said, who's in charge here? Really? We need self-control, and we can fight this thing out in the courts for a long time, and in the legislature, but what we really need is self-control by the City of Los Angeles. I urge you to work towards that end.

Bob Berger, Lone Pine: This question arises simply out of curiosity and is addressed to anyone on the panel who feels they can answer it. I am just curious to know why, in the face of seemingly rather strong stance taken by the cities in Northern California dealing with rationing, making it mandatory, the City of Los Angeles and the mayor of L.A. continue to speak of only voluntary cutting back on water. Thus it would seem to be greatly weakening their position, especially in regard to this court case.

Ewen: Well, as Cindy outlined today, it is unfortunate we do not have a representative from the City of Los Angeles to answer those questions. I don't know whether anyone else here feels competent to speak for the City of Los Angeles.

(Man?): I just might comment on Northern California where rationing is in effect where they don't have any water. That is one way that you are really going to get it.

Jane Bright: This concerns the legal right to ownership of rivers, ponds, streams. I would like to address my question to Mr. Rossman. I wondered if you could tell me if I am correct in stating that the State of California, the people of the state, own the right to those stream channels and river bottoms. Is that correct?

Rossman: I cannot say with such certainty that I could give you an answer I would frankly want to be held to. I would be happy to look into that and get an answer back to you. I do know that if it is a navigable river then there is the public trust doctrine and that the state cannot alienate that public trust. A clear and convincing statement to that effect from the legislature (exists) and there is a whole series of other procedural protections to insure that the state does not alienate its ownership in the public trust on navigable as opposed to nonnavigable waters. I think that raises some very interesting questions under both state and federal law with respect to Mono Lake. I do not know what the answer is with respect to the streams in the Owens Valley.

(Bright?): I understood that the DWP had a legal reading on when they tried to put a pipeline across. I am not sure whether Mr. Wickser can answer this, but I understood that the bottom of the Owens River is actually not the property of the DWP even though the water that courses down it is being appropriated by them for their acqueduct. Also, the dry bottom of the Owens River, which is dry for three or so miles before entering the Owens Lake also belongs to the State of California. The reason I am asking this is if the county had available to them (through appropriative rights) so many acre-feet in the Coyote Creek watershed, what would prevent them from using those acre-feet to send down stream channels (which belong to the state and are owned by the people) through natural water courses into that dry 30 miles of Owens River (also owned by the people in the state) and using it for recreation and wildlife? If it is true that the river bottoms are not owned by any individuals or entities other than the state, and therefore the people of the state, would there be any reason that the water could not be used in that fashion?

Wickser: I would say this. If all of the things you postulate are true, it could likely be possible to do that. You have asked a very complex question,

one frankly that I don't feel competent to answer. I just asked Mr. Fairchild if he might and he said he thought Dick Angeles, who is in the audience, may be able to answer it.

Bright: May I ask Mr. Wickser then if you know any legal jurisdiction that the DWP has over the river bottom of the Owens River.

Wickser: I know of no legal interpretation by our staff on it. They may have done something but I am not familiar with it.

Bright: This just might be a very interesting avenue to pursue. I would like to ask Mrs. Muth if it is true that the county does have x number of acre-feet in the Coyote Creek watershed available to them.

Muth: Jane, I have heard that we do, but I do not know if that is an actual fact.

Bright: I think it might be interesting...

Muth: As you know, where the river bottom comes, the State Water Quality Control Board is always concerned about scouring on the river bottom. Therefore, since they have a concern about the river bottom fish, wildlife, or rather plant life on the river, then you know that we must evidently, or the state must evidently, have some control or authority to be concerned.

Ewen: Is there a representative from State Land Use here at all? That might be a body you would wish to write to, Jane, the State Land Use because they are into a number of issues just exactly like that. In my area, in San Diego County, they are trying to determine the public's use of lagoon land and where the state's public trust does intrude and where the private right intrudes. They have still not resolved it after a number of years, but those are issues under study. Is there anyone who might be able to shed some light? That is something to pursue.

Stan Hayden: I think that I heard that when the State Division of Highways put that new bridge across the river at Laws they had to meet certain requirements because that is a navigable stream and held up putting in the bridge.

Ewen: Time for one last question. I am sorry.

Andrew Kurt: I would like to ask John Heston why exactly it was that the news is off the air now.

Heston: Eastern Sierra News Service had been providing the radio news for KNNC at Lone Pine for two years without pay. We were making our money off our own sponsors. The news broadcast was considered by some to be rather controversial. When we were cancelled abruptly last Friday morning, I had occasion to call the owner to ask him why. In no uncertain terms, for twenty minutes, the station owner's wife, Mrs. Sal Leroy, said that they had to cut the news off the air because of pressure from the DWP. Their radio tower is situated on lease arrangement on DWP land near Independence. That was last Friday. That is what she told us. I asked her if there was any other reason at all, and she said that was it.

Kurt: Can I get one more question in briefly? For anyone on the panel who

can answer it, it is just strictly a factual question. When they are coming up with the water consumption figures for Independence, do they take into account the water used by the restaurants, by the courthouses, and by the businesses there, or is that strictly for residences?

Wickser: The water used in Independence is the total amount of water supplied into the system divided by the population figures. So it does include commercial, park uses, courthouse uses, school uses, etc.

Kurt: And the figures for Los Angeles - are they arrived at by the same method?

Wickser: When we talk in terms of 180 gallons per person per day as an overall figure, yes, that is the same - total water consumed in Los Angeles divided by total population. We also have data showing the actual residential use and it is in the neighborhood of 100 gals. per person per day. The 178-180 represents total use of the city including industrial, commercial, recreation, and everything else.

Ewen: Thank you so much for coming. I think it has been a very interesting discussion. Remember after a short break you have another very interesting discusion. There are publications for sale, evaluation sheets, and thank you for coming.

WHAT DECIDES OUR BASINS' FUTURES?

Helen Thompson: My name is Helen Thompson and I am the League's token member from Mammoth which is a county which has had ordinances on water conservation for a year now. I don't think we were the first in the state, but we must have been one of the first. Now that we have gotten through our last session with no blows, let's take a look at another aspect of the problem. What decides our basin's future? We will first hear from Mr. Jock de Swart, artist, designer and writer. Mr. de Swart:

Mr. de Swart: I am supposed to be talking about aesthetics, and I think probably the greatest thing that can be said about aesthetics was that you saw it when you stepped outside. If the DWP is the pig, I probably should be representing the apple in the pig's mouth. As one of the residents in the City of Los Angeles, which is the place that actually causes all the problems here, it seems rather ironic to me that I come from Los Angeles and it is the end of the water system, sort of the end of the sewer and probably the ugliest place on earth. Here I am, coming to one of the most beautiful places on earth, to talk about aesthetics. In many ways it seems that just by living here, you have such a high aesthetic value and that it is almost unnecessary for me to be here. I think that because of your aesthetic sensibilities it is very obvious to you that the Owens Lake was a lot more beautiful when it was filled with water. Trees are a lot more beautiful when they are lining the main streets of town and creating shade or when they are orchards than when they're cut down and burned. The streets in the towns look a lot more well-kept when they are owned by the owners of the store than when they are leased on a year-to-year basis. Streams are much more aesthetically pleasing when they are full of water and trout rather than when they are dry. Marshes, of course, offer a lot more as marshes than they do as deserts. A little thing I noticed on the way up was that the Sierras look a lot more beautiful when you don't have to look at them through telephone poles (a note for the planning commissioner!). Another thing I have noticed en route to Bishop is that the towns might be more aesthetically pleasing if commerical vehicles are routed around the towns. Of course the thing, which I have heard everyone say many times, is that if the population of the valley was increased, it wouldn't be that difficult to have the Owens Valley looking like the San Fernando Valley. That of course would be the ultimate in aesthetic disaster. So I am glad that there is that consciousness here.

I am sure you are all aware of the things that I have just said. There is a new aspect which is just arising that I think is very exciting and that I am sure you are becoming aware of, if perhaps you aren't already completely aware of. That aspect is in the field of architecture, conservation of resources, which includes water. Basically more of a living with the environment, sort of an Indian perspective. In Los Angeles, a number of the most recent buildings are all glass; these big high steel structures require an incredible amount of energy to heat, even more amounts of energy to cool, and every toilet in the place uses 7 gallons every time someone flushes it for only 1 ounce of whatever. We are beginning to see an approach, for example, in the use of solar

energy, building smaller houses with good insulation with double or triple glazing, roofs that face south with solar collectors that heat both the house and the water, waterless toilets being used in some structures, getting appliances that use less electricity, less water. People are starting to go back to clothes-lines from gas dryers. We are getting even to where people are trying to recycle rainwater off their roofs. Now if this new ethic was starting to be used in L.A. the problem might be alleviated here. I figured it out, if L.A. changed to waterless toilets it would save 20 billion gallons of water a year. That is basically a minimum, with some very conservative assumptions. That is a lot of water. That is not using restricted shower heads and that is not changing from lawns to other kinds of foliage that require less water. Living in Los Angeles, it has just been incredible to me and a number of my friends that during the drought in Northern California they were still shipping water from Northern California to L.A. so that the people in Beverly Hills could water their lawns. That seems totally absurd.

Now, being a futurist, I have to make a few points about what I see as the future. Petroleum being the way it is, I think after the year 2000 you are going to see trains, high speed trains running up and down the valley. You probably won't see cars here and that will be very exciting.

Tomorrow you will be continuing with this very important thing that you are doing here and probably the most important thing is finding the direction you want to go in as a group. Once you know where you are going, it is going to be fairly easy to go in it. When you want to consider the aspect of aesthetics I would suggest you just walk outside and look around.

Thompson: Thank you very much. We are now going to hear from Dr. Bill Eadington, who spoke to us this morning.

Dr. Eadington: It is interesting to note that when I was growing up in the Los Angeles area I considered that area and Orange County and the beaches perhaps the prettiest area in the world, and I think a lot of other people did also. 25-30 years later it no longer is, and I think that is regrettable. One of the important values in American society is the ability to come together and express divergent ideas, divergent thoughts, and to pursue value systems which are fundamentally different from one another. I think in the opinions that have been expressed today there are 3 strains of value systems that are identifiable; these are also common in American society. The first is the ability to do with one's own resources what one sees as his own objectives. This is the basic principle of individualism. The second value system is to strive to improve the lot for your fellow man- the need to serve and a concern for fellow man. The third system is to attempt to take courses of action which will preserve or improve upon the lot for future generations. This is a need which I think is very fundamental for man - to reach forward and touch themselves in the future through their children and their grandchildren.

Economics is the study of how man interacts with nature, how man attempts to fulfill his material needs. Using a very raw brush, we can take a view of economic history in three stages. The first stage began at the beginning of time and ran until around the 1700s or 1800s, and in certain parts of the world still exists today. That is man's long struggle against nature to survive and eke out bare subsistence;

nature was an enemy, which was not denied very often. Over all those centuries man's progress was really very short. Within the last 200 years we have experienced our second phase, with man's overcoming of the basic stinginess of nature, man's ability to transform nature into fulfillment of basic material wants and to work towards a system of affluence. This has been largely aided through the concept of private property and through the fundamentals of modern American capitalism as well as other political social systems. The third phase, which is one that confuses a lot of people now partly because it is so new, and partly because it is so different, is that the solution to part 2 has become the problem for part 3, an overapplication of the very things that allowed us to free ourselves from the stinginess of nature pose a threat in the long-term because they undermine our future ability to progress.

What this leads us into is a situation where we are redefining, to a large extent, the basic concepts of rights and the basic concepts of property that brought us so well through the second stage. Now I want to talk briefly about some of these concepts of property and note where they are important with regard to the individual and where they have fallen down. The basic premise of private property, which exists in America and stems from English common law, gives to the individual the right to develop talents, whether they are his own talents, his property, or his land or whatever, to the highest and best use. The assumption is that if individuals pursuing their own self-interests, do this, it will end up being best for society. Underlying all the arguments to preserve this basic premise is a concept that economists call the lack of externality. What that means is that if you do something with your private property, you do not infringe upon the rights of someone else with regard to his private property. This is probably the single fundamental change or the single fundamental awakening that has created so much confusion and created so much change in the way we are perceiving problems that 10 or 15 years ago, or 20 years ago, we would not have even talked about. In what ways have these principles been violated? Well, the classic cases in economics are situations where someone buys a car, pollutes the air, you have to breath the air, he has violated your private property rights to the air.The DWP comes to the Owens Valley, buys property as any other individual would and makes a contractual agreement with the people in L.A. to sell them water.

It is fine up to that point where their removal of water from this basin infringes upon the basic rights of individuals who live within the basin. This basic idea has been the principle that led to the passage of the National Environmental Protection Act, and of considerable proliferation of environmental laws in the last 7 or 8 years. It has also created a lot of confusion as to how the system operates. One of the benefits of private property, and the systems of private property, is that they provide certain stability for society and they also provide a certain sense of equity and fairness. We know who owns what. Well when you get into these areas of externalities the question of whose rights are where becomes very very muddled. I think environmental law has not been as successful as they thought when they passed the law in 1969. There have been tremendous inequities in problems that have occured. What I would suggest at this point, as you look at this transformation, as you look at environmental law and as you look at the concept of planning, that you do not allow the specific situations to override the need to define workable principles - principles that will withstand changes of circumstances; principles which will not allow for abuse with regard to your policies in planning your future. Thank you.

Thompson: Thank you very much. Next we will hear from Donald Brackenbush on designing livable communities.

Mr. Brackenbush: Thank you Helen. The subject that was given to me was "The Design of a Livable Community" and I have 6 minutes to tell you how to do that. Los Angeles has had such a great history of doing that, that I think we can take a lot of lessons from them as to what not to do. I think it is interesting that the first speaker this morning talked about the accidental preserving of the Owens Valley; how it really happened was that people had their eye off the ball - they were watching the water, trying to get the rights to the water; they were buying land and making sure nobody else was able to develop it. Pretty much, that is how we preserved it. That is a backward way to do it. At the same time they were using the water to develop their city. If you go to L.A. today and drive around, I think you will all agree it wasn't a tremendous success in many ways. There is smog and there is pollution; aesthetically it is not terribly pleasing and I think there are analogies there whereby you shouldn't let it happen twice.

The next step, once we have the water, is to develop a plan, to design a community that is a livable palce. I would like to underscore that that is certainly a wonderful goal. I would say, and I have said this before in front of many of you in this community, that the options in the future are up to you. It took a crisis, it took a drought, it took lawsuits, a lot of coming together, to really begin to focus on the issue. I think the issue is not how to save water, it is what in the world to do with this community. What should the Owens Valley be in 20 years? Water is simply the catalyst to get us, probably to give us, room to begin. As a city planner I have worked in a number of places and I think we are currently working in ten different cities. I think what I could share with you that I think would be of most benefit is what I think your problems are going to be. I listed 8 points which I think are important and I think they are problems for you to overcome.

The first one is this idea of a limited goal. You don't really have a goal yet in terms of its being defined in a 20 to 50 year time frame. Your time frame is short-term; you have been talking about how to save water. All right, I think you have got to jump into the next phase and get into land use - what should the place look like? Begin it at things, begin it at philosophy, begin it at aesthetics. I think you really need to start expanding these kinds of discussions and goals that we have had and really begin to take them on in a head-on way. I think another problem you are going to have is you have a tremendously diverse population. While it's been a nice day, everybody has been more or less amicable, nice weather, good coffee, donuts, and whatever, there's been a lot of conflicting groups here. I think it is going to be a struggle to get a consensus in terms of the direction that you want to proceed in. I don't think we should underestimate that point.

You have a terrible communication problem. The county, well-the two counties, let's talk about both counties at once - are a long way geographically. It is hard to get around, it is hard to communicate; that is going to be a continuing day-to-day problem for you. It is not only a long way to Los Angeles, it is a long way geographically and mentally to Los Angeles. It is going to be difficult to communicate to L.A. as to the exchange of ideas and the sharing and the give-and-take you are going to have to go through, and the negotiations. It's

going to be terribly time consuming. We have got the example of Mammoth Lakes, which has been planning for about five years now, and the Mono plan. I think if you ask 20 people what it really means and how it is going to work, I think you will get 20 different answers. I think that time-frame is going to take 10 years to get a plan. I think you are just going to have to sit down and realize that. It's going to be a long, long haul.

Another thing - it is going to be expensive. I think in the negotiations with the City of Los Angeles, if it comes to that, or in the developing of a rationale and a logic for the plan you are going to have, you will have to develop as much data as they have. You're going to have to have architects and palnners, hydrologists, engineers; you are certainly going to have to hire lawyers and we know they are expensive.

Point number 6 is the politics and how you are going to organize. What sort of organization is active in the plan development, the initiation of the plan, and taking the plan around for approval. Who is that? Is that the 2 counties together; are there 2 plans? Some of the ideas we heard this morning include an Economic Development Commission, an Area Planning Commission, and some basic and fundamental kinds of questions as to how you are going to organize yourselves.

The 7th point is figuring out how you are going to determine what you want to do. It is an amassing of an awful lot of information. Standard planning principles tell us that we need to develop alternatives, take them around, get approvals. What are we going to do? Are we going to vote on these things? Are we going to poll the population? Are we going to do a cost-benefit analysis? There are all kinds of ways to do it. It is a difficult and tedious kind of job.

The last point is who is going to make the decision? That is a major point. Is it the community? Is it to be made in negotiations with Los Angeles? Just how are you going to go about it? I think we have heard some diverse ideas as to directions to go in. We have heard: no grow - let's not grow; we've heard another idea of selective economic growth - let's have a community college and some tourism like Palm Springs; another idea was maybe some clean industry with solar energy. All terribly harmless sounding names, but awfully complicated things to evaluate. So, I think its complicated.

In closing I will say some of those things are the negative; however, you obviously have a lot of positive things. It's a wonderful place to save. I can't think of anything more worthwhile for all of us to work for than to plan for such a glorious place. Thank you.

Thompson: Thanks. Next we will hear about the social ethics and the ethics of nature from Dr. Sommer.

Dr. Sommer: It is very hard, I think, for us to realize that something criminal can go on, not only socially but also ecologically, prior to its actual manifestation. When I read something similar to this, I think of the time I was in South Germany. There was war. Before I read about it, I heard about it. There it was. Then, after many years, I came home; essentially after 18 years. Before when I briefly went to Europe I came as a tourist. I came home after 18 years and I lived for a year in So. Germany, not too far from Switzerland, near the Valley of the Seven Mills; today it is 12 mills but has its name from former times. There is one of my favorite brooks or streams down there, the only one in that particular valley. I remember a time with my friend, an aesthetic man. We

played games down there, hiking, and so on, early in the morning - 5 o'clock. One day he said, "Let's make a fish happy - a happy trout"; I said, "How do you do that?" He pulled up his pants, went in the stream and said, "I'll catch one and then I'll let it go". You know, we had magnificent experiences in that particular valley. After 18 years I came back and that stream was dead. I still saw the long, long valley, farily long for my conceptions. I remembered hiking and two fishermen who tried, in a sad very pathetic way to still find a half-dead trout or something in there. You see, often times we just don't believe it can happen to us; it can happen. We may philosophize, saying "Aw, that's just sheer appearances, it is not for real,ultimate reality, that is the real stuff". We can escape, sometimes even in a healthful way, to contemplate, meditate. Not to get more depressed, and become more destructive; destruction always goes first to ourselves and then to elsewhere and others. And so, I think it can also happen here. I am not sure whether its worse not to be aware of the possibility that it can happen to us. This valley can be, and most likely will be, the way it looks now, a dustbowl. There is sufficient evidence that there are those here at work who are very seriously intent on just using it and then going to the next place.

I felt it even right here this morning from us, the serious ones, the thinkers and those who came prepared. Why not go to the ocean next? Just to go on then, to the next, and to the next will not resolve it because pretty soon we will come to the edge of that ocean and have left it behind, dead. We have to resolve something before we go on to the next, it seems to me. You see, this is where it gets very dramatic to me, and very exciting. Then I see what hope there is for me, you, us, so that we can come to a point of seriously working together. We must not talk around the issues. We have to get together and see that maybe the worst after all is not reckoning with the possibility of destruction, this real stuff. The worst is when we no longer cherish what we have at this point, if we only complain now, this year about the tremendous difference between last year or previous years. We are no longer capable of seeing what I consider the most important event. As I was getting ready today, I was nervous. As I was shaving I looked out and there was a dance going on, a snow dance, on White Mountain's peak. That was good to see. In other words, if we are no longer capable of being happy about what we have now, we will blunder. We will panic and we will make worse mistakes. So that is where our real danger lies; that we are not grateful and happy and receive and use aesthetically and ethically what we do have for our general and basic renewal.

Something that concerned me all day is such phrases as "the beautiful scenery" and so on. My neighbor to the left talked about aesthetics, specifically; I was thinking about a comment I had written down before coming. It was made the other day by a student at the high school, a girl named Cathy. She said, "People take nature for granted". I think she had a very important point. You know,people take nature for granted; they don't really love nature, they are just infatuated with its beauty. My hope, I think, at this point as to what we ought to do, (and it is easier for me to say here as one who has come in recent times, who was not born here) is reevaluate our whole philosophy and our theology, and for once truly listen to those who are represented this morning by Raymond Stone, who have still the voice of the longest part of our sojourn on this earth. We are prone to listen to the data and the ways and methods of the last few years or centuries. The Indians are more inclined to listen to the 41,077 years and the voices out of that time; to listen as once we truly listened to them. They were also more able

to listen to what we have to say.

To see ourselves as the theologians have taught for almost 2000 years, as the creation crown, or to see ourselves as the philosophers have taught for 2000 years more or less, as the epitome of nature is doubted as a healthy attitude. We have stomped around long enough as the epitome of nature, and ecologically it is harder to make a case for us than for anything else.

Thompson: Thank you Dr. Sommer. "A Futuristic Look at the Quality of Life" will be the topic of our final panelist today; Dr. George Seielstad. He is an astrophysicist at the California Institute of Technology Owens Valley radio observatory. Dr. Seielstad:

Dr. Seielstad: Thank you. I want to tell you what a great pleasure it is to be the very last speaker of a long, long day, because I feel as though I am propelled before you as the ultimate test of your patience. I had time to sit here and wonder, why did they pick me? Well, I finally figured it out - they confused astronomy with astrology! So, I think I will go ahead and don the hat of astrologer and tell you what I think will happen. I will start first with some facts and then move towards speculation,which means I won't know what I am talking about. I will try to tie things, as much as I can, to what is happening today because I do think that your best bet of what will happen tomorrow is to look at what is taking place right now.

These are the facts that I think we have to lay down first. There are 4 billion people on the globe today. By the year 2000 that number will have swelled to 7 billion people. Yet, the globe will have no more resources than it has today, so when we have a natural gas shortage in the winter or a water shortage in the summer, 20,30,50 years from now, the situation will be that much worse. We are facing a situation where the pressure of evergrowing demands on finite earth's capacities to supply those demands is in danger of being exceeded; in any case, that pressure will certainly grow. I would just like to say that mathematicians or scientists call this phenomenon exponential growth, and people cannot appreciate what is happening, I think, unless you hear a couple of examples.

One I like to use, even with kids, and maybe it will work here, is if you would get a reward of a penny on the first day, and then double that and get 2¢ the second and 4¢ the third, and everyday you get a daily doubling for 30 days, the man giving you that reward might not think he was being particularly generous. If you work it out after the first week, it is going to cost $1.28, but it might surprise you to know that at the end of 30 days, when you started with a penny and doubled it every day, he will have given you more than $10 million.

Exponential growth takes off very rapidly and feeds upon itself like cancer. I will give you a second example, because the other thing people cannot appreciate is: If we had enough stuff last year, we only upped it about 6% and here we are this year - why isn't there enough now? There is an old French story about a guy who had a pond within which grew a water lily. The lily doubled in size every day. He could go out and trim it, but he was lazy and figured, well I would wait until it covers half the pond before I trim the thing because when it covers it all it will kill everything in my pond. When did he have to act? It turns out, he had to act on the 29th day, because it would cover the pond in 30 days. Even as recently as the 25th day out of 30, it covered less than 1% of the pond. We're approaching that situation where these doublings that

take place for us every 7 to 10 to 20 years are beginning to exceed what the earth can supply. I think that is a simple mathematical statement that is nonpartisan, nonidealogical. It simply says that exponential growth cannot exist indefintely in a system of finite size. Now that fact is going to impact enormously on our economic system because we have developed a system, a highly efficient system at maximizing the flow of goods and materials, and it has been good to all of us. Yet we are at the point where I think it is beginning to struggle with reality. In essence, we have relied very heavily on the marketplace and so-called law of supply and demand. That law begins to fall apart when the supply grows ever larger but the demand dwindles instead of growing. You have to give up that market mechanism. Since it is the heart of the system, it is a little bit frightening. I will tell you why I think it is flawed. I

I think every speaker, starting with the first one this morning, has hit at this point. The reason it isn't working is that future generations will be barred from the bidding. A farmer today can sell his land and make more money easier than by continuing to farm it. Farming is a risky business with considerable struggle, as we all know this year. The reason he can sell that land and look good economically is that future generations that are going to feel pressed by a shortage of food aren't here now to bid the price of his farmland up to a realizable value. So any economic system of the future is going to have to incorporate this idea, which all speakers have alluded to, that there is a future generation out there who would like to be here today getting oil and so on at the price we're paying and groaning about. These are "physical" limits.

There are environmental limits. But there are another set of limits I want to talk about and one of those is social limits. The beauty of our system, hypothetically anyway, is here we are, a democracy, and we continue to grow and grow and we get more and more for all of us. Everyone is going to be happy, and it has worked that way in the past. Now we're running into problems. If you saw an ad that told you, let's take a vacation in an exotic spot because of its beauty and isolation and seclusion - St. Thomas on the Virgin Islands. When we all get there, we are going to find the very purpose of going has been defeated by sharing this thing with everybody. There are limits to what you can do socially as well as the physical limitations. One last limit I will mention is a new one. I think no-one perceives it yet, but to me it is a very profound change from anything we have seen in the past. We witnessed the debate today about DNA, or genetic engineering as it is called in the press. There are people within the academic world who're now calling for limits to what we will inquire about. I think, as far as I know, there have always been people wishing universities would stay out of areas that they have gotten into, but the academic community itself has insisted on the freedom of inquiry. Now there are very respected people, including the man who has just been appointed Chancellor at UC Santa Cruz, who are saying there are certain areas of knowledge out of which we should stay forever. Whether this will be one of those examples I don't know, but I think in the future you will see people choosing areas of potential exploration that we will consciously say, "Let's ignore".

Thompson: Thank you Dr. Seielstad. We now have 2 minutes for each person to respond to the other panelists. Who would like to begin?

de Swart: I will use my 2 minutes to basically say that I have heard some discussion about solar energy in the future. I have done a number of solar installations and they make an incredible amount of sense for this valley right now. If there is anyone who owns a house in this valley, look into solar energy. You will get a 17% return on your investment or it will pay for itself in from 3 to 10 years. That kind of economics you can't ignore. It basically makes sense here because of the amount of sunlight you have, which is very high, and the cost of energy, which is very high.

Sommer: What I want to emphasize is that we are partners at best, rather than emphasizing the view of us as creation crown, or epitome of nature. We should learn to work together with educated Indians. As people who are educated in their own sense we do not need that many more Ph.Ds. We have plenty, and will have what we need as we go along. We need the point of view of that other longer part of our sojourn which we have ignored too easily for quite a while now. Yet we need to listen to them as masters in their sense. Why not be grateful to have Master's and Ph.Ds in their sense here, which means those who have worked 20 or 30 years on something with intensity and have perhaps accomplished something which is helpful. We should listen to them. They have not come and spoken much to us, though we may have invited them, but they speak once in a while. They may also be quiet. In this manner what Dr. Seielstad just brought up limits where we modify our notion that curiosity is an absolute good. Well, there we have experience of many thousand years' thought among the aboriginals, be they Bushman or Pygmy or American Indian.

Thompson: Thank you.

Seielstad: I want to use two minutes to close on a very optimistic note. I think we are in a period of transition and I think people sense that. Our economic system that worked so well in the past is beginning to stagger under the load right now. Of course, any time there is change there is a lot of fear. I am doing o.k. now and if it changes, I might do worse. When you hear this discussion of limits it can sound pessimistic and terrifying. The optimism is this, I think. The fearful argument is usually put this way - we've always been dividing the pie, but the pie keeps growing, so we can keep cutting bigger pieces and we'll all be getting fatter. Now you are saying, the pie is fixed, it is not going to get any bigger, and there are more of us and we're going to carve it into ever-smaller pieces and we are going to suffer. My way of looking at it is not that.

What about the guy who doesn't like pie at all. Why not take the same amount that was in the pieplate and make a chocolate cake or a danish pastry or a chocolate eclair and carve that up. I don't think the economy will stagnate because it cannot grow physically, because it has run into certain limits. I envision something that is enormously dyanmic all the time and won't in any way limit human creativity to exploit it. It will work within a set of boundaries, or within conditions beyond which it cannot exceed, but yet within which it can have constant change and all the excitement that goes along with what we now associate with growth in our system today. I think there is no need to be pessimistic.

Eadington: I would like to address a comment to Dr. Sommer's statement that we should believe Ph.Ds and people with Master's degrees and such that studied so long in the fields. I would be much more pessimistic because I have worked among them, because very often they were wrong. The people who built Los Angeles, for example, were not evil in intent and really felt at the time they were doing what was best for themselves and society and the progress of mankind. In retrospect we can look at Los Angeles and say, "gee whiz-they screwed up". I think what we need to learn out of it is: What are the areas where they screwed up? Where were the mistakes made? How can we learn from those mistakes in planning the future? Basically, going back to the basic dilemna we face is how can we preserve the ability to progress as a society, progressing materially, perhaps progressing intellectually, broadening our horizons, making a better legacy for future generations; how can we do this and still preserve what we consider basic rights to our way of life and basic rights that adhere to other people. I think this is really the very difficult issue. I would like to cite a basic principle that I read out of one of my children's fairy tale books, which I think is one of the more appropriate environmental statements I've run across. Basically what it says is that man must learn to give and take from nature in equal measure, and to set the rest of its course of action along this line. Then a lot of the problems that we have had about exploitation of resources or threatening our future potential to progress may be less a threat.

Thompson: Don?

Brackenbush: Helen, I think I would only like to thank the League once again for bringing us all together and doing this marvelous job. I think that is an optimistic note...

Thompson: Thank you. It is now time for discussion. Does anyone have any comments or questions? Would you please go to the microphone now.

George Anderson: My name is George Anderson. I would like to ask a question of everyone on the panel about master plans and the comments idea, but I would like to ask Dr. Sommer about the philosophical and theological changes that are possible or that should take place. I, myself, have been influenced by the Judeo-Christian ethic, and this means man is sacred, humanlife is the most sacred thing on the face of the earth, and that the earth is possibly profane. In any case, it is an egocentric situation where it all revolves around me, so that any basic plans that I have, or when I begin to figure out basic rights that you talked about, I always figure them all from my own egocentric position. How do I go about formulating or becoming a part of a renewing philosophy or theology which says, "I am sacred and so is the rest of the world; nothing is more sacred than anything else." How do you cope with that?

Sommer: I believe you that you should become aware of two spiritual successions. We are aware of what we call the apostolic succession of transmitting spiritual know-how from generation to generation, and also passing on a blessing to the one who will be a carrier of this authenticity. I also think we should become aware of what I would call an aboriginal spiritual succession. It is not as obvious as the other one because our oldest spiritual successions on this earth have not believed that missionizing is a valid method, that it has greater disadvantages than advantages in the long run. So those in the aboriginal spiritual successions will not do that. They also will not talk about many things and often it

seems to me that it is absolute esoterism, that they will not even talk, but they watch educationally one principle, which has become my favorite; I learned it from them, although practicing it is another matter. Namely, that you do not answer unless asked for real. Meaning that it's a question where at least the other one risks the confidence that one has an answer and asks a true question, not just a disguised answer. There are some attitudes in there I find ecologically much sounder. As a matter of fact, at times anyhow, I am basically of the opinion that our ecological ignorance is becoming aware of the world and the law of the house, the earth, the sky; that our ecological ignorance will not succeed if we do not learn from those who are Master's and Ph.Ds. It is more understood out of the apprentice system. It could include a master carpenter, or a master engineer, or a doctor, meaning you understand something of the basic laws. I would call an architect a doctor in the basic sense, for instance. He knows the basic and beginning structures.

Eadington: I would like to continue commenting on that. This again goes back to a Spanish philospher, Ortega Gasset. there is a problem of becoming an expert; if you become an expert in one area you begin to feel you are an expert in all areas. A lot of the questions confronting you today and humanity today are really very fundamental questions, so fundamental that the scientists or Ph.Ds can get lost in very esoteric arguments and fail to see what is the basic issue involved. I think here it is a right and responsibility of individual citizens who are not masters or experts to understand what are those fundamental issues so they can intelligently guide policy.

Anderson: Yes, I understand. I thought as a layman, the root source of economy or eco was oykos, and that meant household, or world household; that economy meant one who takes care of, rather than...

Seielstad: Can I give you a way out of looking at it? You took, and maybe this will help you, because our system only works if every creature and living organism on it struggles for its own survival; that's been the history of our evolutionary struggle to get where we are now. We are kind of entering a new phase and what I would like to do is give you the impression which is how briefly man has played a part in this picture which is much broader than he is. You think of the earth as 4½ billion years old. It is incomprehensible to use that number. Imagine I shrink the whole earth's history into a one year interval; I will ask you when man himself first appeared on this planet in this imaginary year we are talking about. It will probably surprise you to know it happened less than 8 hours ago, on a relative scale; it has taken a year to create a situation where man can exist. He has been here for a very brief 8 hours out of the whole time. Only about 70 minutes ago did he divorce himself from nature, in a sense, and become the first living creature on this globe to domesticate animals and to grow crops. In that sense, instead of living at the mercy, as we are talking about eking out a subsistence, living at the mercy of what nature altered, he began to alter nature to his own specifications. That alteration only occurred in the last hour out of the whole year. Your Christian ethic began 14 seconds ago, the one to which you are referring. The thing you want to appreciate is how briefly you're here and how sacred the trust is. You raised the point of being sacred, and you are in the sense that you connect an enormous past, a glorious past with all that is yet to come.

It is up to this generation to preserve that or we can end that existence here on earth. If you want one other thing that may take you off the Judeo-Christian ethic, I may not necessarily want to do that, but think about this. There are lots of stars out there like the sun, and there are probably lots of planets like the earth around lots of those stars. There are other galaxies as well as our own. It is entirely possible, I think, that other living civilizations could exist elsewhere in the universe. Many of them could have evolved past the stage where we are, so that while you think you are so important, and all of us do, there are present in the universe right now many creatures whose splendor exceeds ours by many many times.

Anderson: Well, that is real neat, but I am concerned about the struggle of the organism in the environment, you know? Right now, I am the organism struggling for survival. There is hardly anything more obscene than an organism out of context with its environment, right? Thank you.

Thompson: Any other questions?

Edith Larson: I have a comment. I am Edith Larson, a biologist and a resident of Owens Valley. I hate to bring this discussion down to money because I am primarily a biologist and not a pragmatist, but here goes. Six years ago I returned to Owens Valley after an absence of 45 years. I had to build a house. I could not build my house without a window that looked out upon the Sierra grandeur. I asked the builder to please orient my house so it would face the Sierra, which was on an angle of the southwest. I put in a 12 foot window, Mr. Artist, and, Mr. Artist, it has saved me 2/3 of my heating bill. I get the winter sun in that living room and it serves as my heating source from 9 in the morning to 8 at night. The Gas Company always fussed because I use so little gas.

Bob Berger: I just happened to think that the Bible does give us one good illustration from the New Testament which perhaps applies to this point. The parable Christ gave concerning the house out of which an evil spirit has been driven. Nothing had been put in its place and seven more spirits worse than the first came to take its place. I thought of that when thinking perhaps in the not-too-distant future this water problem will be essentially solved one way or the other but we will have much more serious problems to deal with. I want to direct this to Dr. Sommer. I am wondering if the wisdom which could be distilled from the aboriginal age old viewpoint concerning the ecology and how to live with one's environment is not in itself (if we are going to be realistic about it) not on a direct collision course with something which in our western civilization, especially our American experience, has been very dear to us and perhaps still is. That is the basic right of the individual to go where he wants, and to live where he wants, and so forth. "No-one cal tell me where I am going to live. I have discovered the Owens Valley is a really nice place to live. I am going to come there and live." I perceive these two things are on a collision course. One is a basic American premise, I would imagine, and the other is this thing which you are thinking of. Do you see what I am getting at? The two things don't agree with each other.

Sommer: Yes, I see. Let me respond first as a European. Insofar as you have advanced over here in this area of individualism you may have very well received your greatest inspiration from the Indian. I have not seen such strong and highly developed individualism and equality in terms of woman and man, as among even some of your few Paiutes who are still educated in their ways and who were not influenced that much with other ways of thinking. This could be that she has actual power to voice heropinion to the point where it is effective. If the old man doesn't behave, she can put him out because that is her territory. In other words, their individualism, their rights, are very often not only socially spelled out in their oral tradition,but it is also enacted and guaranteed by actual set-ups. I wouldn't be worried there. What I would be more concerned about is the very underdeveloped, or least developed communal sense. We have pursued, and here I am including Europe as well as here, a kind of individualism which now seems to make necessary a forced socialism. At least this has happened elsewhere, and if we don't learn in that area, then we may panic someday and say that we have to more and more enforce it; make it mandatory.

Berger: Do you seriously believe,then, that we as white westerners as much as it might be in a romantic sense attractive to us, can grab ahold of and in a realistic way make use of this aboriginal land ethic, or whatever you want to call it?

Sommer: It took me a long time, just to give you an example, to go with some ease in our inner peace, from the concept of Holy Spirit to that of Great Spirit and feel it means the same. But I have been among Indians, for instance Raymond Stone; I came out here essentially to study under him and I have been learning from him for 7 years. I think he was here in his development, he was older, and so on; he is ahead of me. He could go from his concept, near and dear to him, and existentially real, a Great Spirit, to the term Holy Spirit, or even God. Of course, if he finds a comfortable word in his language, his native Paiute tongue, it is easier. I think all truth is one, that is what I basically say to you in your concern. All great people, which is also maybe too much a nondemocratic concept. All candid people, of all ages, races, and religions have essentially said the same thing. I would like to sum up, it gives me an opportunity to finally say something about my social ethics and my ethics of nature come together in such a way I can draw from my aboriginal sources and others. By the way we also have an aboriginal past - our forefathers too used to think pretty similarly. Ghandi once said, "Not only as I steal from my neighbor, not only as I steal from another, is it theft, but also as I take more from nature than I truly need, is it theft." This second concept is very underdeveloped among us, but it is highly developed amongst aboriginals; they are highly civilized in this matter. So we should above all give up this notion we have in all respects advanced. We have advanced in some things; they have for some reason paid more attention to ther advances and we should talk to each other.

Eadington: I would like to address the issue of mobility and right to travel. That can become one of the critical issues surrounding a lot of the attempts of communities to control government, especially on a society-wide basis. The right to travel and the right to move where

you wish is a very important right. Nevertheless, in the last 30 to 40 years it has created a number of obvious problems. It has created situations like Los Angeles on the one hand, and on the other hand it has created situations like North Dakota or New York City, areas that are losing net population and consequently going through economic difficulties because of it. It may someday become a major issue in the Owens Valley. How can you preserve the individual's right to live where he chooses, and at the same time try to perserve this balance of man's relationship with his environment? One of the ways you could do it is that people very often will move to an area that feels good but also includes some sort of economic appeal. So if you pursue a long-term policy of trying to direct job creation into communities or areas that can best absorb the population increase at least you remove having to restrict the individual's right to mobility.

de Swart: I think from a current planning point of view the philosophy is getting to be that the community has the right to control the population of that community, to control its own destiny and quality of life. Yet from an individual point of view, a person has the right to leave. I think that is getting to be a very important point. Part of human rights on a world-wide basis is that you have the right to leave the situation and go somewhere else. The problem we are going to see in the future is that there won't be anyplace else to go.

(Man?): Has this not been a part of the problem with South Lake Tahoe? A lot of people have discovered that is a place they would like to live?

Eadington: O.K., the problem with the agency created to protect Lake Tahoe...They were given every power except one, and that one was creation of jobs for the gaming industry, so all they have been able to do is create a lot of problems for locals living there. For example, they've destroyed property values, they have put restrictions on the kind of house you can build; nevertheless since the creation of the agency in 1970 the population has increased by 50% and it is likely to increase by another 80% over the next ten years. Whatever that planning agency does, if it cannot control the source of population growth, it is not going to be able to do any of the things it set out to do.

(Woman?): Are you talking about total area around the lake or just the south shore?

(Man?): ..has been around the south shore. The total lake's population has gone from 26,000 to 40,000 from 1970 to 1975. Of that 40,000 29,000 are at the south shore area. The reason people are there is that there are jobs there. Once you create the jobs you have a right to accomodate the people who come to fill them.

Lou Franke: I am Lou Franke from Bishop. I am going to say something pretty radical. Dr. Seielstad pointed out something that is quite important - the rate of growth of man. If man could only take a lesson from the worm. When the worm is in an area where he's overpopulated he stops growing. If you take a number of the worms, they will grow to where they can live. That is our problem. Man all over this whole world keeps growing. In India, they of course have forced birth control. I don't know what is going to happen now that they are changing the regime over there. (Rest of statement unintelligible).

Guy Fairchild: I find this conversation extremely stimulating and I would like to ask Dr. Eadington a question based on the discussion of exponential growth and everything else. Is it possible, through education, to change these trends? Are there economic incentives that are more effective? I just think of President Carter's energy policy. I read where his policy is to try to halve the future increase in the use of energy. He is going to run into all kinds of opposition not trying to cut back, just trying to reduce the growth rate by half. How do we do it? Are economic incentives the principal way to roll?

Eadington: That is one question I find very difficult to answer. There are aspects on both sides that either can generate optimism or pessimism. I am pessimistic because observing the American people react to, for example, the energy crisis in 73-74 with regard to purchase of automobiles. There has been virtually no conservation of petroleum products by American consumers on the average over the last 3 to 4 years despite of phenomenal warnings that you are running out of gas. Now, that is pessimism. On the other hand, there has been a tremendous increase of the awareness of people as to the importance of making decisions right when you are confronted with the ability to make the decision. For example, the concern expressed by the people meeting here. I believe this is optimism. I don't think I can really believe in economic incentives as a long-term solution in an affluent society. One of the reasons people are still buying large cars in the U.S. has been because the cost of gas has stabilized and they can afford it. As we grow more and more affluent as a society, we will be able to afford to be nonconservationists. That is an ethic and that will have to change. I don't think economics can change it. It is more fundamental than that.

de Swart: I am very hopeful about that when the population growth in the United States is approaching zero population growth. That has happened over a long period of time. I think any kind of a social phenomena always has a great amount of inertia; therefore it takes a long time for it to seep into people's minds. But I do think you are seeing more Honda Civccs around than you are Cadillacs. In fact, that you can buy a small Cadillac is pretty amazing in itself. So I do think, if given the information, and if it is made in such a way that it is in people's own self-interest to reduce the population, to reduce their consumption of energy, whatever, after a while people will actually begin to do that. But then if you solve the problems of America you then have the other 7 billion on the outside. So there are signs of optimism and pessimism.

Thompson: One last question. Wilma?

Muth: I can't resist this because while I agree with all the philosophical statements that have been heard on the panel, one thing as a bureaucrat (the word has been used frequently today) sort of amaxes me. You see, a number of you are relating back to regulations. Regulations made by whom? Usually, these regulations are made by these bureaucrats who are being downgraded today. Although we have probably one of the best educational systems in the world in the United States, we still have people who feel that the only way water gets to their house is through a faucet, and milk comes out of a paper carton.

Thompson: Thank you Wilma. It is now time for us to close. I know it has been a long day. A very exciting day, a very stimulating day. We have another one coming up tomorrow. I want to urge you to please come back tomorrow. We will meet at the high school.

INTRODUCTION TO WALKING TOUR

Mary DeDecker

I will tell you first a little about the plant communities of Owens Valley to give you a better idea of what we have here. Unfortunately time doesn't permit us going down the valley as I would like to do. I would like to take you to the Independence area where we have the most impact, but it would be prohibitive for time, so we are going to go out to a couple of places around the Bishop area and interpret as much as we can from what we see here. I think you will get a lot out of it. I did want to tell you about what is in the rest of the valley.

The valley is a deep rift between the two mountain ranges and is filled with a long deposit of sediment. Much of this is sandy; some of it is a fine clay lens. Most of it is alkaline. The lake down at the lowest part is a real alkalized sink, a very heavy concentration of alkali and salt deposits. Then as we come northward it gradually diminishes until there is less salt by Bishop, although we still have some degree of alkalinity. That is why the plants which grow on the valley floor have to be specially adapted to tolerate alkaline in some degree.

Now, the alluvial fans come together and form an apron along the base of the Sierra and to a lesser extent along the base of the Inyos, and these are completely different types of soil. They are loose, gravelly soils with good drainage and the plants which grow there require that type of soil situation, while those on the valley floor are adapted to the soils we have on the valley floors. There is a little overlapping as there is in most natural communities. The water which falls in the Sierra and drains down the fans percolates through this loose soil, gravels, etc. and when it hits the bottom of the fan and contacts the layers, denser layers of soil, in many places it comes up as artesian wells or springs.

Now that most of these artesian wells are no longer flowing, and the streams in the valley floor are drying up, this is a matter of deep concern to those of us who realize the importance of these habitats. On the valley floor there are many marshy places and riparian areas. Starting with Owens River and the river bottom you will see the grassy places on the river bottom on our trip today and then the riperian growth along the stream - willows and various kinds; there are several species of willows, tree willows and shrubby willows and rose bushes and things that depend on the moisture, and then the rushes and reeds found on the water's edge. There are lots of boggy places,some along the river, some in other places where it islow enough to collect water. These are not bogs, they are marshes and sloughs. The water may be fresh but the borders of these sloughs support alkaline-tolerant plants because the borders are alkaline. In the past these have been extremely valuable for water birds along the flyway and of course all the shaded life which centers around a marsh. On the other hand, we have the dry areas away from the riparian and marshy places but we value them very much because there are specialized plants which form a ground cover at these places. They are adapted to grow in these places. These are supported by the high water table of the Owens Valley. The water is not as close to the surface as it would be on the grassland but it is a form of shrub community.

We call it greasewood shrub because the dominant shrub is carcobadeus formiculatus, which is called greasewood here. Don't get it confused with other plants called greasewood in other places. These common names are sort of confusing. Greasewood can go down to about 15 feet to water and still thrive and reproduce. When the groundwater drops below that, it starts to go. It may not die immediately but it won't reproduce, it won't thrive. In the greasewood communities are bunch grasses, alkali sacatom, then sparse groundcover of salt grass if the water level is high enough. There are other shrubs with the greasewood associated with that community. Where the best greasewood shrub communities occur it is quite alkaline. That is why we don't want anything to happen to the greasewood, because if that goes, nothing is going to take its place. We don't have enough precipitation here to grow even a good crop of weeds if we have to depend on surface water and precipitation to support plants on the valley floor. So if those plants depending onthe groundwater go, it is something serious. It leaves vast areas of exposed land. This not only affects the aesthetic values but it also creates a very serious dust problem. We have been told that the particular matter in the area here often exceeds federal standards, and that is our worst form of dust pollution. We will get in the bus and go down to one side and get out and talk about that, and then if you have any questions, I hope you will ask them.

HARD PROBLEMS - HARD CHOICES

Cindy O'Connor: This afternoon's purpose is for us to kind of clarify our thinking and put together what we heard about yesterday and hopefully by the time we leave today we will have set some priorities. Our speaker is here, Bill Kahrl, who was our keynote speaker yesterday morning.

(Unfortunately Mr. Kahrl's speech was not transcribable).

Mr. Rossman will speak for a few minutes.

Mr. Rossman: I will step aside as a lawyer for a moment and express to you the summation of my observations of having been the attorney for the county for almost a year and reaching what I think in this conference is so well timed - hopefully a milestone in the county's relationship with the city, because it is not just a court victory but hopefully also a changing of attitude. I think for the time being it is going to be necessary for the county, for Mono County, and for different constituencies within the county to have to look to the courts when necessary to prevent outrageous and unlawful behaivor. In our society the courts cannot be looked to effectuate the final solution. Let us hope that Los Angeles' response to the court's decision and those that will surely come will not be one of increased incense but rather recognizing that there is some other government of the acqueduct, namely the people of the state. I would like to believe that it is going to be the case and I would like to leave you with the thought that if and when that does become the case, your job is going to be harder and not easier. In a nutshell, everytime the county through the courts, through negotiation, through legislation, can get back more of what we all are entitled to as citizens of this country, the responsibility on you to make your own self-determination becomes greater. The potential for internal conflict increases. That is not bad, that is the way government is supposed to work. I hope you can accept that challenge, recognizing that it is going to be frustrating at times.

I think the most moving experience of my 10 months in Inyo County was Independence Day in Independence, just seeing the people in the valley celebrating the political institutions that we treasure in this country and essentially saying that, like the people of Los Angeles, we too want to have the right to determine our own future. That is going to be tough and you are going to have disagreements and that is a problem. But the alternative is unacceptable - that someone else should tell you how to use your land. In the meantime however, my final advice is as long as we have to be in the courts, in the legislature, your existing county government has done so well to represent your interests. Support it, and please get others who are not here today to recognize and support it. Thank you very much.

O' Connor: Thank you. Now we are ready to begin some activity. The afternoon is fairly structured and you will be given several sets of instructions about the afternoon.

O'Connor: I hope you all enjoyed the discussion groups and had a chance to meet the resource people. Please find a seat and get comfortable

because we are going to request some thinking from you. We are going to take some time now to try to identify the major issues which we feel as a community, or as a group, we need to resolve or we need to get some direction for. We have tried very hard during the last day and a half to provide you with enough information that you can make at least some broad decisions. What we are going to do next is try to identify some major issues that we would like to see decisions made about. After we have identified those major issues, and I want to stress to you that we will be asking from the group as a whole for broad and major issues - after we are through with that portion, we will break into small groups and we will do some brainstorming within the small groups.

I want, right now, to go over the rules of brainstorming for you. The rules of brainstorming are:

1. Anything you say must be to the point.
2. All ideas that come from the group are good ideas, because after all we are brainstorming ideas, so let our minds run free.
3. There is no evaluation of the statements or ideas that come forth. The only evaluation that can take place is for clarification purposes only.

After we have gone through the brainstorming process we will take a fewminutes to decide if any of the ideas really belong together or if they're just different ways of saying the same thing. What we want to do is adopt an attitude here of acceptance of all ideas. I am going to ask you to hold onto that idea until the end of the exercise, at which time you can get as biased as you want and we will let you vote on the ideas that came up.

At this time I am going to turn this meeting over to Emilie Martin who has been our chairman and organizer of this conference. She will help you identify the major issues you will want to make decisions about.

Emilie Martin: Within our committee we threw a lot of ideas around and decided that since we had given you so much information the past day that we were going to depend on you to come up with what great big issues you want to deal with when we talk about the "Can We Set Priorities for a Healthy Valley Community". By that I mean a community that stretches perhaps from Mono Lake down to Owens Lake. We are thinking big right now.

SUMMARY

IDENTIFYING THE ISSUES

1. Decision making - local participation
2. Autonomy - local
3. Greening of the valley - restoration What alternative?
4. Population control - planning for limited growth
5. Complete master plan - use of public lands
6. Quality of life
7. Open communication between people
8. Multiple uses of water
9. Base line information
10. Economic viability
11. Lobby group - independent education
12. Ethics and equitable distribution of resources

TOPICS/ISSUES - MAIN GROUPS

1. Quality of life
2. Decision making
3. Economic viability
4. Base line data and master plan
5. Priorities for water use

1. QUALITY OF LIFE

Group 1 -

1. Value system as social mechanism
   a. Clarification
   b. Coordination and cooperation
   c. Continuity of processes
   d. Planning
2. Quality of life for the future (100 years+)
   a. Preservation and enhancement (optimizing conditions and actions)
   b. Capacity of land
   c. Health continuums (physical, mental, social and environmental)

Group 2 -

1. Living within your resources and demanding population control.
2. Don't encourage people to come to the Owens Valley who don't have jobs.
3. Maintain open spaces.
4. Maintenance of air quality and water quality.
5. Maintaining condition of natural renewable resources.
6. a. Marshes to restoration
   b. Natural plant communities
   c. Fish and other wildlife
7. Economic development - even agriculture must meet the standards for the quality of life previously mentioned.

Statements -

Preservation and enhancement of environment (maintaining and improving condition of the resources)	167
Capacity of the land	146
Economic development	84
Value system	66
Health	44

2. DECISION MAKING

Group 1 -

1. New governmental entity to communicate between government and citizens.
2. Taking personal responsibility for input of existing agencies.
3. Need for additional communication - competitive newspaper, radio

Group 2 -

1. Obtain all pertinent information.
2. Citizens' lobby - representation by citizens groups for particular interest.
3. Liason groups - citizens advisory committee - pass information to decision makers.
4. Owens Valley member as voting member of DWP Commission.
5. Objective evaluation of information - determine possible consequences.

Statements -

Create a new entity as impartial liason group(s)	97
Voting representative on DWP Bd. of Commissioners from Owens Valley	116
Gather and disseminate information through the competitive media in order to obtain all pertinent information	137
Creation of a pressure group for citizen input and lobby	74
Determine the consequences of alternative actions, evaluate the information	49
Identify the decision makers	39

3. ECONOMIC VIABILITY

Group 1 -

1. Security of life and property - independent of Los Angeles control
   a. Leases
   b. Security of investment
   c. High value - low buld industry (electronics, jewelry manufacture)
   d. Ranchers have firm water supply
2. Appeal the present tax assessment for DWP land
3. Better transportation
   a. Railroad
   b. Trucking
4. Zoning update
5. County-owned airport for controlled commercial development
6. Control our own land and water use

Group 2 -

1. Expansion of educational opportunities
   a. Vocational
   b. Educational (environmental)
2. Expansion of tax base encouraging new businesses - high value/low bulk
3. Encouragement of economic atmosphere which allows for the return of young people
4. Establishment of special districts, either county-wide or regional
   a. Economic planning
   b. Recreational planning
   c. Educational planning

Statements -

Independence from L.A. - security of life and property	250
Appeal present tax assessment for DWP land	67
Better transportation	45
County owned airport	14
Expansion of educational opportunities	100
Expansion of tax base and new businesses - high value/ low bulk	43
Encouragement of economic atmosphere for return of young persons	22
Establishment of special districts either county-wide or regional	12

4. MASTER PLAN - PLANNING

Group 1 -

1. Consortium of county governments to include Inyo County
2. Establishment of goals
   a. Communicate with all factions
   b. Consider long and short term consequences
   c. Consider means of gathering information
   d. Consider who will make the final decisions
3. Apply for finances

Group 2 -

1. Include people, animals and plants in the plan
2. Baseline information
   a. Use existing data
   b. Generate new information
3. Identify existing groups and form a regional representative overseer and consortium of county governments - insure that planning is consulted
4. Assure full public participation by newsletter or digest in laymen's terms

Statements -

Establish goals	160
Apply for finances	46
Include people, animals and plants	50
Baseline information	68
Identify existing groups and form a representative overseer or consortium	43
Assure full public participation with laymen's terms, publication of information	62

5. WATER USES

Group 1 -

1. Recreation and tourism	87
2. Agriculture	67
3. Domestic	92
4. Restore natural habitat to some acceptable former level	119
5. Maximize personal choice of water available	13

Group 2 -

1. Water storage for future generations	45
2. Export	4
3. Local recreation	2
4. Industrial	11

Statements -

See Above List

O'Connor: We have promised rebuttal time of two minutes to Phil Phister.

Mr. Phister: Actually this is not so much of a presentation as to clear up what I gathered right away was a misunderstanding from this morning's tour. I, first off, what to congratulate the group here. I want to point out, too, that I am not a bureaucratic supporter of the Department of Water and Power in any sense. We have our fights just like anyone else does, in the Department of Fish and Game. But I do recognize fact from fantasy, and therefore I wanted to clear up this whole thing. When I first came to the valley about 20 years ago there was no communication at all between the DWP and even the agencies. What I have seen happen in the past 20 years - some of you are relatively new to the valley - is literally phenomenal. When Paul Lane came in as District Engineer in the 1960s he and I began to recognize this problem. We saw that something had to be done in terms of interagency cooperation and communication. We set up this group called the Interagency Committee on Owens Valley and Wildlife. It gives a forum once a month for agencies within the valley, all of it from Mono County clear on down, about 20 of them, to meet and discuss their different plans which in a way becomes a de facto general plan of agency participation and mutual understanding of one another's goals. Part of this involved recreational development; another part involved strict preservationist activities. Curiously, what you saw this morning with Buckley Ponds was seemingly a conflict between the two. One of our projects for recreation was the establishment of a warm water fishery in East Bishop near the airport. Buckley Ponds was rehabilitated for that purpose. Along with this was the strict preservationist philosophy in fish slough, about 2,000 acres out there, to be utilized strictly to maintain the natural pristine flora and fauna of that area. This was done under the auspices of the university's Natural Land and Water Reserve committee, of which Dr. MacMillan is a member and I served as an advisor. This is a very fine group.

What happened in the Buckley Ponds situation is that the Water and Power operator, who is directed to clear a water channel, to keep water in the Buckley Ponds for fish purposes, got carried away without adequate supervision and dug the thing much bigger than anyone thought he was going to. Water and Power administrators here were as upset about this as anyone else. There is a plan afoot now to rehabilitate what can be rehabilitated from that imprudent bulldozer work out there.

So this was not some flagrant means of draining the marsh at all. It is just something that went awry without anyone's real knowledge of it. I just want you to understand that. I do hope that we can continue to work together as local government and groups such as yourself. Herein lies our strength. Often I think your suspicion that local government agencies and entities become too ingrown and work too much together are right. In a sense, it seems to me, we become uncritical of one another. Not at all. We are not without our faults. Groups like this keep us on the ball so that we don't end up patting each other on the back. We do have the same basic goals that you do, and what this comes out as being is having some degree of development here with essentially retaining our way of life. That is why we are all here.

Martin: It is late and I ciuld do a lot better job of summarizing, but I want to assure that each of you that signed up and paid your money and left your address will receive a written summary of those things we very hurridly jotted down. I just want to sum this up by saying that it has really been exciting to see this all happen. It has been fantastic that each one of you came. We have heard a lot of ideas, and we have examined many problems and looked at some hard choices. We have gotten some new perspectives on complicated interrelated issues of land and water use. We have brainstormed. Maybe we didn't have the process down where we defined objectives and defined concepts and ruled out one but not the other. We will keep that in mind as we evaluate this.

The League set out to provide a format to this community to define and examine the problem, to enlarge the participation, to make the facts on these issues and the political process more accessible to each one of you. We wanted to provide an opportunity for coordination among agencies and different levels of government. We wanted to especially define those channels that you as citizens have access to and need to use. Your head might be a jumble right now - I know mine is. After all, we have had numerous ideas. Try to sort them out. But, if in the quiet moments of the next few days, you have time to think about these and find what it is you personally can contribute to what we have to do. That is the beginning. A theme that constantly comes to me and goes through my head every now and then is that people get the kind of government they deserve. That spurs me on and makes me realize we all have jobs to do.

Harsh words, often frustrating, but we all have a role to play, maybe a small role, maybe a large role. So if we can each choose one of these goals and one of these priorities that we can work towards, or refine an idea that we can support, we would be on our way to some workable solutions in this area. Hopefully, we have started the dialog. Hopefully, we have found some priorities.

I have heard one of the ultimate goals of this conference is to achieve local control of decisions, to carry on, to strengthen the local government. I hope we can begin on this long hard frustrating job. You may or may not know that the League went through this process ourselves, as far as priorities for water use. We had to go through the same miserable process of finding if we had some priorities. The one consensus that we came up with, and we only mention this at the end of the conference, is that the League believes that water is a basic support for the life system. Therefore, groundwater pumping should not be allowed beyond the root zone of existing native vegetation, including all plant communities on the floor of the Owens Valley in 1970.

So, for you people in the community, you should know that the League will be working to achieve that particular goal. If the momentum of this conference is to be carried forward, each of us has some follow-up work to do. In the planning material we heard about the follow-up work. We will do our best. We will have an entire transcript that you can buy for the cost of the paper its printed on. We have funding from the Inland Counties/Health Systems Agency to do the transcribing. We have a woman who is working at that right now. As I told you in the beginning, there will be the summary that will go to everybody. From there on, I hope some of these ideas can be implemented. Thank you so much for coming.

Water Sharing: We Reach a Milestone

Appeal Court Says Burden Caused by Drought Doesn't End at County Lines

BY ANTONIO ROSSMANN

A week ago Thursday a state Court of Appeal in Sacramento sent an extraordinary message to the City of Los Angeles: Before the Department of Water and Power can justifiably seek to extract additional groundwater from the Owens Valley, the city must implement an effective water conservation program on its own turf. The court's memorandum, based on the state constitution's mandate that all California waters be put to reasonable and non-wasteful use, calls on Angelenos to conserve during the present drought and to plan for conservation in the future.

This pronouncement comes in the middle of a lengthy suit that Inyo County is prosecuting to thwart DWP attempts to pump great amounts of water from beneath the Owens Valley. Inyo County, where the valley is located, has claimed that the DWP cannot implement such a program without violating the state Constitution and the California Environmental Quality Act. While awaiting final resolution, the Court of Appeal last summer sharply restricted the flow of Owens Valley well water.

Then, three weeks ago, the DWP asked the court for permission to double its rate of groundwater pumping. It argued that such an increase was justified by the drought and the high cost of Colorado River water, which Los Angeles would have to buy from the Metropolitan Water District if it cannot obtain suppliers from the Owens Valley or elsewhere. Opposing this motion, Inyo County pointed to the environmental damage increased pumping would do to the valley—already drought stricken—and to the lack of an effective water-conservation program in Los Angeles. The time has come for vigorous enforcement of the constitutional duty to conserve water, said Inyo County, and it urged the court to impress that duty on Los Angeles.

Four days later, the court spoke. Noting that they would not ordinarily disclose their views until much later in the proceedings, the judges said that the public importance of their ultimate ruling required the court to release a preliminary memorandum stating its reaction to the DWP request.

The court briefly described DWP's "voluntary" water conservation campaign (including "Captain Hydro coloring books" but *not* including any ordinances or regulations) and its stated goal of reducing water use by 10%. In response, the judges said if the city fails to carry out its constitutional duty to conserve water, that would be sufficient reason—all by itself—to deny permission for increased groundwater extraction.

The court's words, though brief and preliminary, call on each Californian in this year of drought to share the burden of using our state's resources more wisely:

> In relation to the state's current water crisis, the effort at voluntary conservation is inadequate to justify the requested relief. The California Constitution abjures the waste of water and seeks its conservation in the interest of the state's entire population. When the state's water resources dwindle, the constitutional demands grow more stringent and compelling, to the end that scarcity and personal sacrifice be shared as widely as possible among the state's inhabitants.

The justices also noted that DWP could not establish a need for Owens Valley groundwater merely because the purchase of MWD water might increase DWP rates. In conclusion, the court wrote:

> Unless and until the municipal government of Los Angeles installs and implements methods which are predictably capable of achieving substantial water savings and demonstrates a need for water rather than rate preservation, its motion for leave to extract additional underground water from Owens Valley is not likely to achieve success.

Assuming that the court's pronouncements become final (which appears likely in view of the conviction with which the court spoke), the justices have charted a new course by which we Californians must use our resources in the future.

There was a time when the citizens of Los Angeles, with our wealth of water, could consider ourselves separate from other parts of the state. But from now on we must recognize that the state is but one ship in which all Californians are equal passengers. Because the state constitution mandates conservation to protect California's *entire population*, scarcity and personal sacrifice must be *shared among all inhabitants*.

These are compelling words. No longer do we aid the North or protect the Owens Valley because we like to; we aid and we protect because it is our constitutional duty.

Just as important, the court has also said that we must now prove a reasonable need for water before we extract new supplies. In the past all a water developer had to do was establish the absence of prior or higher claims to the water. Now, however, the developer must show—before development is allowed—that the alternative of conservation has first been exhausted. Such a sensible rule will ensure that we take from nature only that which is absolutely necessary—a rule that will serve us well in coming years as we face the likelihood of more frequent and more permanent scarcity of water and other resources.

The appeal court has marked a milestone in our law and our history. In the long and often bitter fight over Owens Valley water, residents of that valley have often been called to sacrifice in the name of a so-called "greater good." At present they alone bear the burden of opposing attempts by the DWP to extract still more of their already depleted supply. Now let all Californians, in South and North alike, gratefully acknowledge what the embattled residents of Inyo County have tentatively won from the court: rules of reason by which to coexist with nature and with one another.

Former public adviser to the California Energy Resources Conservation and Development Commission, Antonio Rossmann of Los Angeles serves as special counsel to Inyo County in the case discussed here.